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LECTURES

ON

DISEASES OF THE BRAIN AND NERVOUS SYSTEM,

NOW IN THE COURSE OF DELIVERY IN THE UNIVERSITY OF PARIS.

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LECTURE VIII.

HEMORRHAGE OF THE CEREBELLUM. — LESIONS OF SENSIBILITY IN HEMORRHAGE OF THE BRAIN.

In our last lecture, gentlemen, we also touched upon hemorrhage into the various points of the cerebral hemispheres, and having discussed the functional disorders accompanying each lesion, we passed to the cerebellum. We now propose to continue the history of sanguineous effusions in this latter portion of the cerebro-spinal axis, and in so doing we would demand not only your attention, but something of indulgence and patience; we shall be compelled to enter into several details on this subject, that may appear tedious. The question which we are about to investigate has not been studied by many writers, it therefore requires a minute analysis of the cases which we have been able to collect in the records of the science; these are not numerous, our task will not therefore be very long. We are acquainted with only thirty-two published cases of hemorrhage into the cerebellum. Let us see what we can learn from a careful analysis of those cases. In investigating the subject of hemorrhage into the substance of the cerebellum we have two questions to resolve; 1st, Does an effusion of blood into this portion of the brain actually produce paralysis, as in cases of cerebral hemorrhage? 2nd, Supposing the existence of paralysis with cerebellar apoplexy demonstrated, on which side does the lesion of motility manifest itself; have we paralysis on the same, or on the opposite side?

As to our first question, if we would decide it simply by *à-priori* reasoning, it is a much more difficult one than you might at first imagine. We are not sufficiently acquainted with the physiology of the cerebellum; experiments have not determined, in any thing like a satisfactory manner, the functions which belong to this portion of the brain; we are, therefore, compelled to rely almost exclusively upon pathological observations, and we shall presently see in what manner they resolve our question. As to our second question, whether paralysis takes place on the same side as the effusion, or at the one opposite to it, if we would determine this point also by *à-priori* reasoning, we must examine anatomical facts; and what do they lead to? To the conclusion that paralysis should manifest itself on the same side as the lesion, in cases of hemorrhage into the cerebellum, because its fibres pass to a part of the spinal marrow where there is no intersection as in the pyramids. If, then, we adopt the conclusions to which anatomy seems to lead, we should say that the loss of motion is collateral for cases of apoplexy of the cerebellum, because here we have no intercrossing of fibres; it is opposite in cases of cerebral apoplexy, because the fibres passing from the hemispheres intercross at the superior part of the spinal marrow, in its anterior pillars; however, we beg you to remember what was said upon this latter point in our last lecture, when we endeavoured to overthrow the anatomical explanation hitherto received, and to show that if hemorrhage of the cerebral hemispheres does produce loss of motion in the opposite side of the body, the reason of the phenomenon escapes our knowledge.

I have just told you that anatomical facts would lead us to conclude, that in cases of effusion into the cerebellum, the paralysis should manifest itself on the same side of the body; this, however, is far from being the case; experience demonstrates, that in a great majority of such cases the paralysis is crossed. The lesion of motility occupies the side opposite the effusion. This, as you see, is the same effect produced by effusion into the cerebrum. Let us now try to re-

solve the questions we laid down a little while ago. Let us assemble our facts together, examine and analyze them, and endeavour to ascertain some general principles, by carefully comparing what has been observed by others with the facts of our own experience.

Several of the facts which shall serve as a basis for our conclusions, are published in the fifth volume of the *Clinique Médicale*; however, many more have come to my knowledge since the publication of that work, and we can now lay before you a mass of thirty-two cases, all, observe, relating exclusively to

Hemorrhage into the substance of the Cerebellum.

Amongst these thirty-two cases, there are only twelve which do not serve to answer the questions we have put; they are not accompanied by sufficient details, although interesting on many other accounts; thus their authors generally content themselves with mentioning "a strong attack of apoplexy," &c., but neglect to say by what modification of movement the effusion was followed, and take no notice whatever of the nature of such modification; of these twelve cases, seven refer to hemorrhage into the median lobe of the cerebellum; six of these are related by M. Serres in the eleventh volume of his anatomy of the brain; the other is by Dance, in his memoir on acute hydrocephalus, printed in the *Archives de Médecine*, January 1830. In none is any particular mention made of the state of motion in the limbs. Three other cases refer to hemorrhage in one or other of the lateral lobes, one of these belongs to Selliot, the other to myself; however, I only saw the patient after death; the third you will find briefly noticed in Dr. Abercrombie's work on diseases of the brain, page 238; here also the effusion took place into the right lobe of the cerebellum, but the author merely says, "the patient lay in a comatose state for forty hours, and then died. He does not refer in a distinct manner to loss of motion. There remain now two cases, and in those the effusion was double, occupying both hemispheres of the cerebellum at the same time; one has been published in the *Archives Générales de Médecine*, and is given without any details whatever. The last case is related by Morgagni in his work "De sedibus et causisque morborum." He found the individual dead, and the upper limbs strongly contracted. This is too imperfect an account to afford ground for any deductions. Hence we have only twenty cases in which sufficient details are given to allow of our comparing the lesion with its effects. They are more or less perfectly described, and we shall now examine them in succession. And, first, to determine our first question:—

Is Apoplexy of the Cerebellum accompanied by Paralysis?

What do the facts say? In the twenty cases just alluded to, we find only three in which no paralysis existed. The first of these three cases was published by M. Bayle, in the second volume of the *Revue Médicale* for 1824, page 70. Here the lesion existed in the middle lobe of the cerebellum. The patient fell down suddenly, without consciousness, but the power of motion remained. M. Bayle assures us, that when the patient was pinched, he withdrew his limbs with a certain degree of flexibility. Paralysis was absent, then, in this case. The individual died on the fifth day, and on the third before his death, was seized with convulsive movements of the lower limbs, and some stiffness about the region of the neck.

The second case of apoplexy of the cerebellum without paralysis, is contained in the thesis of M. Michelet, on "colorations of the cerebral substance" sustained before the Faculty of Medicine in 1827. Here the patient, a young girl, eight years of age, had been struck with an apoplectic attack two years before her death. She had amaurosis, but no paralysis; an ancient cell was found in the right lobe of the cerebellum; however, it is right to observe, that this case is not sufficiently exact to be conclusive. The author does not say whether he had examined the patient from the commencement, at the date of her first attack. She might have been paralytic then, and have recovered the motion of her limbs. This case, then, merely shows, that at a certain period of time effusion into the cerebellum was not accompanied by any lesion of motility.

The third observation has been published by M. Droullain, in his inaugural dissertation. Here no paralysis existed, although an effusion of blood was found in one of the lateral lobes of the cerebellum. The patient died, exhibiting nearly the same symptoms as those mentioned in the case of M. Bayle.

Thus, out of twenty cases in which the lesion of motility is described with accuracy, we find only three where motion remained intact; in all the rest, viz. seventeen, we find the existence of paralysis expressly mentioned. Here our first question, then, is answered, "Does paralysis accompany effusion of blood into the cerebellum?" Yes, certainly. Our next question is, What is the seat of the paralysis? The answer; Paralysis shows itself in the form of hemiplegia. Finally, we may ask, in these seventeen cases, where hemorrhage took place into the cerebellum, giving rise to paralysis,

What was the particular seat of the Hemorrhage?

Did the effusion occupy the middle lobe, the lateral lobe, or both together? Does it coincide more frequently with one form than

with another? Let us again examine our facts. Of the seventeen cases accompanied by hemiplegia, one only acknowledged for its cause an effusion into the median lobe. This case is reported by M. GUIOT in the journal which preceded the *Lancette Française*, in, I think, the old *Clinique des Hopitaux*, t. 1, no. 70, page 110. In the sixteen remaining cases, the effusion was situate in one or other of the lateral lobes. Thus we have determined two points; first, that paralysis exists; second, that it exists in the form of hemiplegia; and, finally, that in seventeen cases of hemiplegia determined by effusion of blood into the substance of the cerebellum, one only occurred with hemorrhage of the median lobe, eleven of the lateral.

Again, we have here to ask a question which we have already resolved with respect to the cerebrum. Thus we may inquire if this hemiplegia, existing, as we have just shown, in sixteen cases, manifests itself on the same side as the lesion, or opposite to it; in other words,

Is the Paralysis of Cerebellar Apoplexy direct or crossed?

Let us have recourse to our facts as usual. What do we find? Of the sixteen cases, the paralysis occupied the opposite side of the body eleven times; eleven out of sixteen, crossed paralysis; two of these eleven cases belong to M. SERRES. One has been published by M. CAZES in his thesis on paralysis, in 1824. Another was observed by Dr. CHAMBEYRON at *Salpetrière*. A fourth case was observed in the service of M. PIORRY, and published under his authority in the French *Lancet* for 1829, October 17th. Another, and one of the earliest cases, was given to the public by Dr. HURTOT, in his thesis. Finally, you will find five others in our fifth vol. of the *Clinique Medicale*. We should, however, remark to you, that in Dr. CHAMBEYRON's case (and in one of those which we have published), hemorrhage into the substance of the cerebrum coincided with effusion into the cerebellum; strictly speaking, therefore, we have only nine instead of eleven cases, of sixteen which show that paralysis may occur at the side opposite the lesion in the cerebellum. We have been compelled to enter into details that may appear long and tedious, but they were necessary, absolutely unavoidable. The questions we had proposed, could only be answered by an appeal to facts. We were compelled to assemble these from different sources, submit them to analysis, and lay before you the results.

Before proceeding any further, we have to establish a *division* which is not without importance in the study of *cerebral apoplexy*. Either the cerebellum alone is injured, or effusion has taken place at one and the same time into the substance of the cerebrum and the cerebellum. Let us take the first division and ask,

When the Cerebellum alone is compromised, can we have direct Paralysis?

a circumstance which, as you know, sometimes occurs with hemorrhage of the cerebrum. The records of medicine furnish us with only a single case of paralysis occupying the same side as the hemorrhage, in cases where the lesion is strictly confined to the cerebellum. It is published by M. TAVERNIER, in his thesis on loss of memory, sustained in July 1825. We must examine this fact with some care, as it is unique—the only exception to a rule which embraces a good many facts of an opposite kind.

The individual who forms the subject of this observation was attacked for the first time, in the year 1812, with an access of apoplexy, marked by a complete loss of motion in the limbs on the left side of the body. Eight years passed over without the recurrence of any accident. In the year 1820, the patient suddenly lost the power of motion in the right side of the body, and this time the access terminated fatally. On examining the body after death, the ancient lesion was discovered in the left side of the cerebellum. A recent clot was found occupying the middle lobe of the same organ: this latter evidently corresponded with the late attack, and was the cause of death. Here we have an example of an old apoplexy, shown by the remnant of a cyst, which gave rise during life to direct paralysis; that is, to loss of motion on the same side as the lesion. The case seems well detailed, but if we study it, we find a great objection, which in our eyes considerably diminishes its value. Thus M. TAVERNIER did not attend the patient during the first attack in 1812; the history of the case was given him by the patient's wife: it is therefore only hearsay testimony. The woman may have observed badly; she may have mistaken one side of the body for the other, as people often do: in a word, her evidence cannot be accepted as conclusive, and we must regard this case as only half a fact. We therefore conclude, that when the effusion of blood engages the cerebellum alone, the paralysis is invariably situate in the opposite side of the body; at least we are compelled to draw this conclusion, until new observations come to shake it in a more direct manner than that of M. TAVERNIER. Now for our second division:—

When Hemorrhage takes place simultaneously in the Cerebellum and in the Cerebrum, what do we observe?

We have lately seen an example of this event in disease: three others are recorded in our work on diseases of the brain. You will also find a case in the *Journal Hebdomadaire*, t. i., page 41, and two or

three in the work of M. ROSTAN on "Ramollissement." You saw that when hemorrhage exists in the cerebellum alone, the paralysis is opposite; but let us suppose another case. Imagine a patient with a double hemorrhage, one in the left lobe of the cerebellum, the other occupying the right hemisphere of the brain; what should we observe here? Paralysis of the four limbs? Double hemiplegia corresponding to the double hemorrhage? No such thing; although the cerebellum may be full of blood, no effect is produced by it on the motions of the body. It is the brain alone which influences motion, masking, or rather altogether absorbing, the faculty of the inferior organ; assuming to itself the whole direction of voluntary movement, and thus giving rise to a phenomenon, which, though inexplicable, is worthy of the most attentive consideration. The cases published by ROSTAN and others prove this fact beyond doubt, although their authors never thought of the application when they published them. And remark, that in several cases where we have a different kind of lesion in the brain and cerebellum, as atrophy for example, the same thing takes place. Thus a diminution of one lobe of the cerebellum, which if it existed alone would certainly modify the faculty of movement, loses this power as soon as it becomes associated with atrophy of the cerebrum, and paralysis is observed only on the side opposite the injured hemisphere of the brain.

We have now passed in review hemorrhage of the cerebrum and cerebellum, together with the lesions of motility that accompany it. Let us pass to effusion of blood into the substance of the spinal marrow, or, rather, to the

Paralysis occasioned by the effusion of Blood into the Spinal Marrow.

Here the phenomenon is a simple one and easily understood, for the cause acts in the immediate vicinity of the nerves that supply the voluntary muscles. In most cases the paralysis is double, the limbs on both sides of the body are deprived of motion, and the seat of this double paralysis will naturally depend on the seat of the effusion, as the latter occupies a more or less elevated point of the chord. In some cases, however, hemorrhage of the spinal marrow is followed by hemiplegia; this is of rare occurrence; but you will find an example well detailed in the work of M. OLLIVIER on diseases of the chord. Finally, we may remark that the paralysis is never crossed, as we see is almost universally the case in hemorrhage of the cerebrum or cerebellum.

Hitherto we have confined ourselves to loss of motion as it may exist in the voluntary muscles of the limbs. It is time to consider paralysis of other parts of the body: to examine how far the other functions, depending upon muscular action, are deranged by hemorrhage into any part of the nervous centres. However, we shall speak of paralysis principally in connection with hemorrhage of the brain, for the influence exercised by effusion of blood into other parts of the nervous centres, upon the muscles we now allude to, is not well understood. Let us examine each of these muscular parts according to the different regions in which they are situate, and first for

Paralysis of the Muscles of the Eye.

Paralysis of the muscles, which direct the movement of the globe of the eye, has sometimes been observed; it is, however, a circumstance of rather rare occurrence; the loss of motion does not strike all the muscles to an equal degree; hence their antagonism is lost, and the phenomenon so well known under the name of strabismus, takes place; but this symptom, we again repeat, is seldom seen in cases of cerebral hemorrhage. The eyelids may also be deprived of motion, and particularly the levator palpebræ superioris. In some cases it precedes the loss of consciousness, and the general paralysis, for a very considerable time. We call to mind one, especially, in which the patient was unable to keep his upper eyelid from constantly falling down, for three weeks before the attack.

Paralysis of the Cheeks.

Those different parts of the face, the muscles constituting the cheeks, may also be engaged, and, indeed, this happens more frequently than for any other of the parts comprised in the present series. It is worthy of remark, that the facial paralysis always occurs on the same side as the hemiplegia, a fact which we cannot explain by the decussation of the anterior fibres of the brain in the pyramids. When once established, it produces certain phenomena that are worthy of being noticed. The paralysis is most appreciable in the buccinator muscle; hence, when the patient eats, the paralysed cheek is distended passively, until the alimentary mass is removed by a purely mechanical action, and, in severe cases, at each expiration the cheek becomes in like manner passively distended, the buccinator swells with air, and when the latter is pressed through the mouth, it gives rise to the phenomenon popularly known under the phrase "fumer la pipe," smoking a pipe. The want of antagonism in the muscles of the face is also the reason why the patient, when he laughs, or talks with vehemence, &c., makes the ridiculous grimaces we sometimes observe.

We have said that the face is constantly paralysed on the same side as the limbs. We must correct this assertion, for exceptions, though excessively rare, still exist. We have seen one case in which hemiplegia existed on one side of the body, and para-

lysis of the face at the other. This is the *only* case we have witnessed, and here probably the nervous centres were affected with a double lesion.

The Movements of the Tongue

are very variously modified in persons affected with cerebral hemorrhage. In the first place we observe a certain number of cases where the movements of the tongue remain intact—where it conserves a perfect integrity of motion, while the other parts are more or less profoundly injured. In other cases the motions of the tongue are imperfect; the organ at first remains immoveable for a short time, and is then suddenly thrust out, after extraordinary efforts on the patient's part. Finally, in other cases, the tongue is completely paralyzed; the patient is unable to put it out; the slightest motion is imperceptible, and the organ remains lifeless in the bottom of the mouth, in spite of the most violent efforts to advance it. In this latter case language is lost, not from any injury which has been done to the organs of voice, but from want of the mechanical means necessary to distinct articulation. Sometimes the tongue is affected with only a partial kind of paralysis; the patient is able to thrust it out, but the tip deviates sensibly to one or other side. We may ask then, To which side? Answer: The deviation of the tongue is not constant; however, we may lay it down as a very general rule, that the point turns towards the paralyzed side of the body; thus, if the hemiplegia exists on the left side, the tongue deviates to the left &c. The other case is infinitely more rare; examples however exist (and we have seen more than one), where the tongue was directed towards one side of the body, while paralysis occupied the opposite membranes. The motion of the tongue is generally recovered long before the limbs begin to enjoy the faculty of locomotion; thus, it is not rare to find a patient speaking without hesitation, and complete master of his tongue, in ten, twelve, or fourteen days after the occurrence of cerebral hemorrhage, while the lower or upper extremity is still weak and motionless. In most cases, then, the lesion of motility, as regards the tongue, is much less considerable than in the limbs; there are, however, some exceptional cases; thus we have examples on record of individuals who have fallen down in a state of apoplexy. On recovering, the members remain weak, the walk is unsteady, the arms feeble, nothing more; but the voice is gone, the paralysis of the tongue is complete, and the patient is unable to articulate a single word. Now for certain other muscles.

Paralysis of the Neck

is excessively rare in cerebral hemorrhage. We have never had occasion to observe it. When the muscles of this region are paralyzed, the head inclines towards the injured side, while the face is drawn to the opposite. Paralysis of the muscles of the larynx is also extremely rare; however, you will find a very curious example of complete aphony accompanying cerebral hemorrhage, in the work of M. Moulin.

Respiration and Deglutition.

The respiratory muscles are not affected, except in cases of a most dangerous nature, where the attack has been sudden, and the coma supervenes with intensity, in a rapid manner. The muscular tissue composing the pharynx and the larynx is sometimes struck with paralysis, but this also is very rare. We never observed it except in severe cases, and it is generally a mortal symptom; the result of this paralysis is a difficulty, or, in some cases, a complete impossibility, of deglutition, and the prognosis, as we said, then becomes very unfavourable. In certain other cases, this difficulty of deglutition forms the prominent symptom; for a considerable time before the actual effusion into the brain, we observe no other premonitory phenomenon. Dr. Flandin has published a case of this kind relative to a young man twenty-eight years of age, who, in consequence of violent mental emotions, was suddenly seized with *malaise*, and impossibility of swallowing; there was no other symptom worthy of notice until the following night, when the limbs on the left side of the body were suddenly deprived of sensation and motion; the difficulty of deglutition, with the paralysis, continued unabated for thirteen days, when the former gradually abated; the hemiplegia however continued unchanged. This is a rare and curious case; it shows in how many bizarre forms nature seems to present the same injury of the nervous centres.

Paralysis of the Rectum and Bladder

has also been observed in cases of cerebral hemorrhage; however, we believe these latter accidents occur much less frequently than has been imagined; nevertheless, it is always good to be on your guard, for the urine may be retained, especially in recent cases. When therefore you have a patient affected with apoplexy, you must be careful to examine from time to time the region of the bladder, and as the patient does not enjoy sensibility, you must not only touch this region, but ascertain the actual state of the bladder by percussion. The muscular fibres of *the stomach* have been said to partake sometimes in the general paralysis, but this is an assertion which requires further proof before we can admit it.

Duration and Termination of Paralysis.

Once produced, the paralysis which is really the effect of cerebral hemorrhage, presents

itself with the essential character of persistence: it may last with unabated intensity to the patient's death, or it may diminish without completely disappearing, or it may at length disappear in a perfect manner. When the paralysis subsides, it generally does so in a slow and gradual manner, and this is an important fact to observe, for it shows that the lesion of the nervous centres consists in effusion of blood, and not in simple congestion, when the patient continues to live for any considerable length of time. The paralysis may persist for twenty years, or even longer, and then the limb either conserves its original form, or the nutrition of the extremity becomes diminished, and it wastes away in a sensible manner. In other cases the diminution of the paralyzed member is much more rapid. We remember one example in particular, where the limb was evidently much smaller than natural within eleven hours after the date of the effusion. The paralysis, as we have said, may gradually diminish, but still at the end of many years some modification of the motility yet remains. The limbs are not active in their movements; they feel heavy, or the fingers remain habitually flexed, &c. These permanent accidents often coincide with little or no lesion in the brain. We had occasion to examine the body of a patient affected with paralysis twenty-seven years; the loss of motion, however, had gradually diminished, and at the second attack, which proved fatal, nothing remained but a simple weakness of the limbs on the left side of the body. After death we found, in the substance of the right thalamus, a hard line, of a dull whitish colour, not more than six lines in length. This was all that remained of the ancient coagulum; a recent one existed in a different point of the brain. Another division, which we established a while ago, is that in which the paralysis disappears completely at a greater or less period after the occurrence of hemorrhage. Such a case has been seen, and thence we are induced to conclude that the coagulum has been completely absorbed, and that the nervous influence is transmitted with its original force through the cicatrix, the last vestige of an ancient hemorrhage. In some cases of the kind now alluded to, even this cicatrix is removed. In others, however, we discover more or less trace of lesion, such as cysts of various sizes, &c.; and yet, long before death, all paralysis has vanished. Here, then, you see one and the same condition of the brain, in which paralysis may be absent or exist, according to individuals,—a new proof, in addition to those so often insisted upon in the commencement of our present course, that besides the morbid conditions appreciable to our senses in the dead body, there are others, equally important, which escape our anatomical investigations, but which add their all-powerful influence to the former, in favouring or preventing the development of functional disorders.

The Disappearance of the Paralysis, in general follows a certain order.

What is that order? In most cases the tongue, the face, the lips, first recover their movements; the tongue ceases to deviate, the mouth recovers its natural form, and is no longer awry. After that the limbs regain the power of motion, and almost always the paralysis disappears more slowly in the upper limbs than in the lower. We have already noticed how members which have remained a long time paralytic lose their volume, or become stiff or contracted; but this is not all: in many other cases, shortly after the apoplectic attack, the side of the face and the paralyzed limbs are from time to time agitated by convulsive movements; one would think that the blood at once stimulates and deadens the nervous influence. In cases of this kind we have sometimes found the nervous pulp surrounding the coagulum perfectly free from any lesion that could explain the symptoms of irritation; in others we have seen the coagulum surrounded by injection of the cerebral substance, or by more or less softening, accompanied with coloration of the nervous pulp. Thus we have endeavoured to complete the history of paralysis depending upon effusion of blood into any portion of the nervous centres: it now remains to consider lesions of sensibility, and lesions of intellect, in connection with the same subject.

LESIONS OF SENSIBILITY OBSERVED IN HEMORRHAGE OF THE BRAIN.

During the course of this and the last lectures, we passed in review the various accidents of motility that present themselves, either in connection with hemorrhage of the brain, of the cerebellum, or, finally, of the spinal marrow: having disposed of this, the most important and interesting part of our subject, we shall now take up the lesions of sensibility which accompany effusion of blood into the cerebro-spinal axis.

These lesions are much less constant in cases of cerebral hemorrhage than those of motility, and much more difficult to trace to any determinate alteration of the brain. However, we must follow nature as she presents herself, although we may be unable to explain her actions: we shall therefore consider lesions of sensibility in the brain itself; in the cutaneous integuments; in the organs of sense; and, fourthly, in the different mucous membranes susceptible of being submitted to experiment. First, let us examine

Lesions of Sensibility in the Brain.

Sometimes the occurrence of hemorrhage is not preceded by any trouble of sensibility in the brain. In other cases it has

been preceded, for a greater or less period, by a few accidents connected with modified sensibility. Thus the patient is subject to a weight in the head, to cephalalgia more or less violent; he is giddy, troubled with vertigo, &c., and these symptoms frequently prelude an effusion of blood into the substance of the brain. They are, in fact, phenomena of congestion, alternating in degree, and at length terminating in hemorrhage.

Modifications of Sensibility of the Skin

we have to distinguish under two classes. We must study them, first, as they present themselves before hemorrhage has taken place; secondly, as they are seen after the occurrence of that accident. Before the instant of being struck with apoplexy, many individuals do not experience any modification of the cutaneous sensibility. This is a general rule, but admits of many exceptions. Thus some patients experience a curious sensation in the limbs: they feel a peculiar kind of coldness, as if the hands were suddenly plunged into cold water. Others complain of a pricking pain, of numbness &c., in the fingers or toes, or even in the whole of the limb. The different perversions of sensibility which we have now pointed out as preceding the effusion of blood, may exist always in the same point of the skin, or affect in turns different points of the cutaneous periphery; they may manifest themselves on both sides of the body at the same time, or be confined, as was said, to a single member, which is commonly the one which will subsequently be attacked with paralysis.

Nothing is more variable than the period of time separating the first appearance of these lesions of the cutaneous sensibility from the moment of hemorrhage; sometimes they precede the latter by a few days only; in other cases the numbness, pricking pain, creeping sensation, &c., have existed many years before the occurrence of hemorrhage. We have seen a remarkable example of the latter circumstance in the case of a woman at *La Pitie*, who, at the age of fifty-two, had been struck with an attack of apoplexy; from the age of seventeen this female experienced a sensation of creeping in one of the hands; at first intermittent, the sensations at length became constant, and shortly before the period of effusion, were joined by a similar feeling in the lower extremity, together with some giddiness and headache. Thus you see that the prodromes of this kind may be prolonged for a very great period indeed, and that in cerebral hemorrhage the attack is preceded by various disorders of sensibility; sometimes these latter are so well marked that we can even predict beforehand the side of the brain which will subsequently be implicated in the disease. Remember, however, that accidents of this kind are rare, and that you cannot expect to meet them frequently as the precursors of apoplexy.

We now arrive at those lesions of sensibility which are observed after the effusion of blood has actually taken place. In many cases the loss of voluntary motion is not accompanied by a destruction of sensibility; the patient is unable to move, but he feels at other times that sensibility is either completely abolished, or merely modified, and in this case the modification of feeling usually takes place in the same side as the paralysis; in a few rare examples, however, the feeling becomes abolished at one side, and motion at the other. The sensibility once modified in consequence of cerebral hemorrhage, what do we observe? In proportion as we become removed from the instant of hemorrhage, the sensibility of the skin returns, and is almost universally restored, long before the limbs have recovered the power of motion. Thus, in the first few days after an attack of apoplexy, if you pinch the patient's skin, he does not evince any symptoms of feeling; in a few days more, sensation, though dull, exists; and, still later, the power of feeling has returned in the limbs, though still incapable of executing the slightest motion. The sensibility of the various

Mucous Membranes accessible to the Touch

may also be modified in a greater or less degree; the conjunctiva covering the globe of the eye is sometimes so insensible that it admits the approach and even the contact of the finger, without giving rise to any uneasy feeling; in some cases the membranes at the entrance of the nares, mouth, &c., seem much less insensible at one side than the other, and all these modifications, very various in degree and seat, seem in some measure connected with a lesion of the fifth pair of nerves. The face and lips also suffer in some cases of the above kind; in one case I have seen a remarkable diminution of sensibility of one side of the mouth and nostril, in an individual in whom the whole corresponding side of the face was also insensible.

The Organs of Sense

may partake in their turn of the general disturbance; the sense of vision remains intact in a great number of cases; however, when the attack of apoplexy is very violent, the power of seeing is frequently completely lost. When vision is troubled, the accidents may appear, either before the hemorrhage has taken place, or after its occurrence, or at the same instant that the patient is attacked. Before the effusion, some individuals experience various disorders of the sense of vision, various strange and unusual sensations, which are felt at no other time. Some are tormented at the idea of flies constantly passing immediately before the eyes; others

have a veil or fine membrane like a spider's web drawn before their eyes, covering everything with a species of cloud, as when the crystalline lens begins to alter; others constantly see a coloured object in everything they regard; all bodies to them are painted with little red or black points. Diplopia or double vision has been sometimes observed as a precursory symptom of cerebral hemorrhage, and in some few cases this phenomenon has been intermittent; other individuals are struck with complete blindness, and this presents the most striking premonitory sign, existing nearly alone until effusion takes place; or the loss of vision may disappear and return again at uncertain intervals. Some authors affirm that in certain cases the sense of vision acquires an unaccustomed degree of sharpness before the attack of hemorrhage; we have never seen an example of this latter phenomenon. Thus you see that several functional troubles are connected with a disturbance of the brain for a greater or less period before the occurrence of hemorrhage: they show that some change, which we are unable to appreciate, but whose nature it would be of the utmost importance to determine, takes place in the cerebral pulp, or in its manner of acting, long before the lesion which characterizes apoplexy.

At the instant the effusion of blood takes place, vision may remain intact: it may be destroyed or weakened on one side or both. When the hemorrhage is very violent, vision of both eyes is generally abolished. In cases of less gravity, the power of sight may be simply weakened, or lost at one side of the body only; and in this latter case what do we observe? In some individuals the loss of vision occurs at the paralyzed side of the body; in another class it is at the opposite that the modification of sight is observed.

We have endeavoured, by a careful examination of cases, to determine whether these different troubles depend on a difference in the seat of the lesion, and although we have not been able to establish this in a satisfactory manner, it still remains probable that the diverse modifications of vision in the cases of cerebral hemorrhage we have just described, are connected with the seat of the effusion, and the influence it exercises on the various roots of the optic nerves. You know how these nerves are derived, by numerous filaments, from different parts of the brain, and, moreover, how the intersection of the two chords is incomplete; hence some fibres pass directly from the brain to the organ of vision; others, on the contrary, decussate the fibres of the other nerve, and pass obliquely to the visual organ of the opposite side; hence we can conceive, that as the hemorrhage may implicate one or more of these different fibres, the loss of vision may take place at one side of the body or at the other, and the various modifications of this sense be in some measure explained. The observations we have just made, refer principally to loss of vision at one side of the body rather than at the other; but a more general question presents itself, viz.,

When the power of Seeing is completely abolished, can we affirm that a particular portion of the Brain is injured?

—that the lesion, that is, occupies the thalami, the corpora quadrigemina, &c.? No, certainly not; if the hemorrhage be violent and extensive, we have complete abolition of the sight, no matter what region of the brain be attacked, because in these grave and dangerous cases, the whole organ is equally compressed; however, we have cases on record which show the existence of a similar phenomenon with a small coagulum, situate now in one part of the brain, now in another. M. Serres, to whom we owe many researches upon this point of the physiology of the brain, affirms that blindness does not occur when the lesion is situate above the level of the thalami nervorum opticorum; the effusion must take place in the optic ganglia, on a level with their commissure; but this and several other opinions of the same kind require further examination and more imposing proofs before we can admit them without reservation. It is certain that blindness may coincide with a lesion, not of the brain, but of the cerebellum; we have before drawn your attention to this interesting point of pathology: we shall not, therefore, recur to it again. We must not neglect to mention a phenomenon of the visual organs often connected with cerebral hemorrhage, viz., dilatation of the pupil; but as this symptom is merely the consequence of loss of sensibility to the retina, it comes under the same head as blindness, and may be classed under the modifications of vision.

The other senses follow the same rules as vision. The *hearing* may be modified either before, during, or after the effusion of blood. Many patients complain of ringing in the ears, strange noises, and various other hallucinations of a similar kind. As to the senses of smell and taste, we have nothing particular to remark, except that they also may present different modifications of sensibility in cases where the fifth pair of nerves is implicated in the lesion of the brain.

We have thus discussed the various lesions of motility and sensibility that occur in consequence of hemorrhage into the nervous centres. We have also, as you must remember, examined how far these diverse modifications of the power of motion are connected with a difference in the seat of the lesion. We might submit lesions of sensibility to the same rigorous examination. The sensibility of the different organs and surfaces is modified, without any nota-

ble difference, whether the lesion be seated in the brain or cerebellum. When hemorrhage takes place into the mesocephale, the cutaneous sensibility is very rapidly abolished, and the same observation may be applied to effusions of blood into the centre of the spinal marrow.

ST. THOMAS'S HOSPITAL.

CLINICAL LECTURE

ON CASES OF

DISEASES OF THE JOINTS.

Delivered in the Session 1835-6.

BY MR. TYRRELL.

LECTURE III.—Diseases of the Ligaments of the Knee-joint, and Disease simulating those Affections.

Progress of Cases previously described.—Gentlemen, I shall to-day continue the subject which occupied my last clinical lecture,—diseases of the joints. (See Lancet, No. 644, page 528). Respecting the four cases of fibrous capsule of the hip-joint, then described, three are well. The patients were, an elderly man, a boy, a young man, and a woman. The two patients whose cases were left for further consideration were Septimus Carter and Sophia Moath. *Septimus Carter*, as regards the affection of the hip, seems quite well. He was here yesterday, when I carefully examined him. Pressure over the joint did not cause any suffering. He has some slight pain about the knee, attributable to a slight continuance of disease of the fibrous capsule.

The woman, *Sophia Moath*, whose local disease I said had been retarded by ill health, is improved as regards the local disease. The secretions are better, but her health is so far from being good, that she wishes to leave. The air of the hospital does not agree with her. She is to quit to-day, but I have procured her address, and shall ascertain the progress of the case for your future information.

After these cases, I mentioned two cases of inflammation of the synovial membrane of the knee-joint, one in which an *increased* secretion had given rise to a puffiness of the joint, and the other characterized by a *diminished* secretion. The first patient was well when I mentioned the case, and the second has since been dismissed as cured. There is no sensation of crepitus, on moving either the tibia or the patella.

Next, we had two cases of disease of the cancellated structure. In one the head of the tibia was attacked. The patient had been presented as cured, so far as the disease admitted of relief—that is to say, all pain was gone, and the man was able to use the limb with tolerable freedom, the motion being a little interfered with, in consequence of the alteration of the articular surfaces.

The other case was of a rather aggravated kind, in a woman named Sullivan. The condyles of the femur were enormously enlarged, without giving way. I have seldom seen so great an enlargement without there being abscess, or more severe disease than existed in this instance. At the last report I made, she was directed to apply to and keep on the surface of the joint, the blue ointment, with soap cerate, in equal parts, adding a little opium. The subsequent report says, "the condyles are much reduced in size. There is some pain and tenderness over the lateral ligament, which pain is increased at night, but not so greatly as materially to disturb rest. The health is a little impaired. She complains of pain in the head, which might be attributable to irritation of the mucous surface of the bowels, she having slight diarrhœa, for which she was directed to take the compound chalk mixture, and a small quantity of port wine was given to her." Two days afterwards, the report says, "the bowels continued a little relaxed, but the headache is relieved; the local affection, however, appears rather aggravated," in consequence perhaps of the debility ensuing from the affection of the bowels. The pain was rather more at night, disturbing her rest, and she complained of some tenderness on the surface of the condyles, particularly in the situation of the external and internal lateral ligaments. In the space of the next four days, a considerable amendment took place. The general health was much improved, the pain and tenderness of the joint were less, she rested well at night, the bowels were regular, and the appetite was improved. Yesterday, the day after, I inspected the part, and was rather surprised to see the diminution that had taken place in the condyles, which is very unusual to any great extent. Perhaps the thin shell of bone had shrunk after the absorption of the internal deposit. The diminution, also, of the periosteum, which had been thickened, may have tended to account for the diminution in the size of the part.

There is mentioned in the report, "pain in the situation of the lateral ligaments." These ligaments, in such a case, are naturally put on the stretch; for the distance of the points of attachment above and below is necessarily increased, and slow inflammatory action is thus produced. Since the condyles have diminished, the pain has altogether ceased. I expect at our next meeting to report this case as cured, so far as it is curable; that is to say, that all inflammatory action has been subdued.

CASE 1.—*Disease of the Internal Lateral Ligament.*—I shall to-day direct your attention to one case of disease of the ligament of the knee, and to another which has the semblance of that disease. The first is the case of Anne Fitts in Queen's Ward, aged 36, of regular habits, an inhabitant of Bethnal-green, admitted October 29th. She said that about two months ago, after exposure to cold and damp, she experienced a dull aching pain in the right knee, increased on motion of the joint, and particularly severe at night. Leeches were applied without benefit, and on her admission, she complained of much pain on the inside of the right knee, particularly in the situation of the internal lateral ligament, more severe at night and disturbing her rest. There was some pain over the whole joint, but more upon the inner side. The leg was flexed upon the thigh to a great extent, and any effort to extend it produced great pain. The muscles which flexed the leg appeared to have got into a contracted condition. I ordered her half a grain of acetate of morphia at night, and, to relieve the local affection, a moxa was applied over the lower part of the vastus internus muscle. Here you may remark, that there was a deviation from the principle which I inculcated in a former lecture. I said it was best to apply the moxa near the part which was the seat of the disease; and so it is where there is sufficient substance to admit of the eschar. The coverings, however, over the knee-joint are so thin, particularly over the internal condyle, that there would be a risk, on the separation of the slough, of the ligament being exposed, and producing a more severe form of disease. So the moxa was applied a little above it.

November 7th, the report says, her pain greatly relieved; sleeps well at night; pressure over any part of the joint is not productive of much pain; the general health remains good; the moxa discharging very little. From this time to the 20th, she made very little progress; there was rather more pain in the knee, and she was unable to extend the leg. However, she slept well, the appetite was good, and the secretions were in order.

December 2. Rather more pain in the knee, which she attributes to efforts to extend the leg. Had little rest last night in consequence of this. I desired that the moxa should be repeated, as the former had nearly closed, and, further, that instead of the passive motion from day to day, the knee should be placed on a splint, with a hinge, which, by means of a screw, could be gradually extended, and that it should be screwed out daily, but not to such an extent as to produce suffering. The application of the splint produced some pain, which lasted a very short time however, and she now suffers but little. There is but little tenderness, and what remains is just in the situation of the internal lateral ligament, otherwise she is well. Yesterday, also, I had the opportunity of seeing her, and I was pleased to find that the leg, instead of being closely flexed on the thigh, had now got nearly to a right angle with it, and, no doubt, by the continuance of the same means, we shall eventually render this part perfectly free, that is to say, the limb entirely extended.

Remarks.—This is a common case of affection of the knee, particularly in women. The internal lateral ligament is, for an obvious reason, more liable to diseases in the female than any other ligament in the knee-joint. We find, on looking at the skeleton, deprived of the soft parts, that even in the well formed male the femur has a little inclination inwards, towards the median line, as you trace it from above to below, and that from the difference in the length of the two condyles the tibia is put nearly in a straight line, so that every person who is well formed, is slightly in-kneed. But where the pelvis is broad, as in women, and the upper part of the thigh-bones is separated to a great extent, the inclination inwards, towards the median line, the obliquity, is greater; consequently, all females who are well formed, have that particular inclination of the limb which is termed in-knee conspicuous. Sometimes this occurs to a very considerable extent. You may observe in a woman who is walking, when the pelvis is very broad, that she has a slight waddle, inasmuch as she is obliged to throw the inner condyle of one femur over the other, as she brings it forward in progressive motion, otherwise she would strike one knee against the other. This gives a rolling walk to women who have a wide pelvis, and on every occasion of forcible extension of the leg, as in running, jumping, and so forth (and it occurs also in falling), the internal lateral ligament receives the greatest stress, and is, therefore, more frequently injured, and more subject to disease, than any other ligament of the joint. Next to this the posterior ligament oftenest becomes affected, because in the extension of the leg beyond a certain degree, that ligament is put most on the stretch. There was no other evidence of affection of the knee, in the present case, further than some general pain, which, however, was trifling in comparison with that which existed just over the internal lateral ligament. The contraction in the joint is not uncommon. The muscles are not placed so immediately about the knee-joint as they are about the hip. We have, principally, tendons passing round it, and it is curious that the muscles above more frequently become affected than those below, which go to supply the feet. But the contraction of the knee may be attributed not

so much to any morbid condition of the muscles as to the position which the patient maintains to enjoy rest, or freedom from pain. The patient, therefore, lying on the back, flexes the leg on the thigh, and suffers less in that position, particularly when the internal ligament is affected. The ligament being diseased, the moment the leg is extended the former is stretched and the pain more severe. From constantly maintaining a flexed position for many days together, therefore, the contraction becomes almost permanent, and considerable force is required to effect the extension when it has existed for many weeks or months. The points in this case, therefore, are, that the part diseased was indicated by the seat of the pain,—and the character of the disease by the pain being worse at night,—thus affecting the fibrous tissue. The motion of the joint without crepitus, showed the synovial membrane to be free from any participation in the injury. She has been cured under the simple application of small moxæ, and attention to the general health.

Case 2.—*Affection simulating Disease of a Ligament of the Knee-Joint.*—Harriet Winch, aged 29, a cook, residing with a family in Thames-street, was admitted into Lydia's Ward on the 4th of September. She states that about two months ago, after much exercise, she experienced pain at the posterior part of the left knee, which in a short time became so severe as to oblige her to discontinue work. She then went into the country, where, from rest and quiet, the pain left her. She returned to her situation, and in the course of two or three days the pain again attacked the knee with increased violence, and was particularly severe at night, disturbing her rest. Leeches were applied to the knee, but with little or no benefit. On her admission, she complained of a dull aching pain at the posterior and inner part of the knee, particularly towards evening and during the night. The posterior part of the joint was apparently a little swollen, and extremely tender. I found after her admission that I had been led into an error, probably from not quite understanding her description of her case. I understood that she had had an affection of the knee, applied some counter-irritant and leeches, gone into the country, and there recovered, attributing the recovery of the local affection a good deal to the application of leeches and blisters. But it appears that in stating this she referred to the treatment on the second attack, when she was an out-patient, otherwise I should have been more careful in my inquiries when she was admitted. She was ordered, in consequence of the disturbed rest, and the disordered secretions, to take small portions of calomel, with opium, every night, with leeches to the knee, for the extreme tenderness, which was thus relieved for a short time, and she was cupped over the vastus internus to six ounces. This afforded little relief. She was now ordered an additional quantity of opium, and from the sensation of extreme heat in the knee, a cooling spirituous lotion was applied to it, as she thought it would be grateful to her.

On the 16th (nearly a fortnight after) the pain and tenderness were somewhat less; the rest at night was much less disturbed, the condition of the bowels and secretions was good; the uterine functions were regular. The opium was still continued, and a blister was now ordered to the knee.

23. Rest rather better at night; in other respects much the same. The former blister having healed, place another over the joint.

Oct. 6. Complains of much pain in the posterior and inner part of the joint. Omit the opium, as it produces headache and constipation. Blister repeated for the third time.

14. The pain and tenderness less; rest at night less disturbed, but she still complains of pain in the head, which is referable to the forehead.

23. The pain in the knee greatly relieved; pressure produces but trifling suffering, but the pain in the head is still very distressing. The opiate was again tried, with a stimulant, the liquor opii, with the camphor mixture. Apply the strong blue ointment, with lint, to the knee, not to be rubbed in, but merely laid on the surface.

30. Pain in the head less, but still distressing. In other respects much the same.

Now from my inquiries, and seing the little benefit derived from the local remedies, I began to suspect that there was an hysterical diathesis, and the local disease was continued principally from this. I now ordered her to take the compound galbanum pill, and, with this, a small quantity of hyosciamus every night.

Nov. 4. Not quite so well; the inner part of the knee continued rather tender; rests better at night, but is occasionally disturbed with pain. She was now ordered to take the pill twice a day, and upon the affected part was to be placed the soap cerate, simply with a small quantity of opium, the blue ointment having produced some degree of superficial irritation.

11. Less pain in the knee than since her admission, but pressure over the inner part of the joint gives pain; rest at night not disturbed, and general health improved.

18. Pain in the knee again severe, and the joint tender. I now increased the power of the anti-hysterical medicine, giving the ammonia of the tincture of valerian twice or three times a day, in drachm doses.

25. Much the same. Complains of pain in the knee, and rest disturbed at night. Frequent tremors of the limb, which last

about ten minutes, after which the pain is very much increased. Tenderness over the whole joint, more particularly at its inner and posterior parts; pain in the head distressing. I now changed the remedy, giving her the subcarbonate of iron, still, however, holding the opinion, that the affection depended a good deal on hysteria.

Dec. 2. Pain and tenderness the same; complains of throbbing at the joint; says she has occasionally extreme heat at the inner part, which continues about a quarter of an hour, followed by a corresponding degree of coldness; trembling of the limb occurs more frequently; pain is increased for a short time after the cessation of the tremors; appetite more impaired; the secretions from the bowels are extremely offensive, of a dark colour; the bowels are torpid, but the uterine functions are natural. I directed that she should have the asafœtida injection, about half a drachm of the common asafœtida dissolved in half a pint of tepid water, and injected every evening. On the 8th, after she had had one or two injections, she complained of some tightness across the chest; rest much disturbed; headache remained; altogether much in the same state. Appetite a little improved. This patient, also, for the present, will quit my care, as she is desirous of leaving the hospital to obtain country air, which, after the first attack, did all that was necessary.

Remarks.—This has been an interesting case, inasmuch as in the first instance there was every evidence of affection of the joint of a serious kind, that is to say, acute inflammation of the internal lateral and the posterior ligaments. Perhaps the situation in which the affection was described by her to exist, prevented me from inquiring so far into the history of the case as I should have done; and this combined with a belief that she had been relieved, as I said, by counter-irritation and leeches, induced me to believe that it was a case of disease of those ligaments, from inflammation, which would be relieved again by rest, and the treatment which had before been adopted. I therefore treated the case at first as declared in the report which I have read to you, and until I found that she had the nervous tremulous pulse belonging to hysterical patients, that she was frequently the subject of headache, seldom without it over the forehead, and that she had a pallid look. This, however, was a little puzzling, when we came to find that the uterine secretions were in a proper condition; but as I have seen frequently exceedingly well-marked hysteria, even in a violent degree, while the uterine functions have apparently been in a good condition, I was not so much surprised as I otherwise might have been.

Now there are further symptoms here with regard to the knee, which it may be as well to point out, that convince me the affection is not one of actual inflammation of the ligaments, but that it is a *sympathetic affection* depending upon a peculiar condition of the constitution. If she had had merely inflammation of the internal, lateral, and posterior ligaments, the pain would have been confined to those parts particularly when the limb was at rest, and she would have complained of pain there, especially on pressure; but when you come to examine the surface of the joint, it matters little where you press. If you press on the patella, on the ligamentum patellæ, between the patella and the internal lateral ligament, there, or even on the vastus externus, or internus, or on the insertion of the internal muscles, or higher up, or lower down, it is all the same; she still complains of pain. It is true she complains of pain more if you press on the posterior or lateral ligaments, or on the anterior part of the joint; but supposing that had been fibrous disease, what would be likely to occur under the unimproved condition of general health? I know that the fibrous disease would have gone on. Besides thickening, we should have had ulceration taking place, and further tumefaction, an increase of pain, with general rigors, indicating the commencement of suppuration, instead of which you find that in one day's report the knee is described as being rather better, the pain less severe, and the rest better; then a day or two afterwards, without any obvious reason, the pain is aggravated, and the local disease rather increased, and the patient thus going backwards and forwards. This is not the character of actual disease of the ligaments, unless there be some peculiarity of the constitution, some apparent change, from time to time, which will enable you to account for the local alterations that take place. This case has been one of considerable interest, and it has assumed so closely the character of ligamentous disease, that I shall take care to investigate it further. I have therefore desired Mr. WHITE, who kindly assists as my clinical clerk, to take the patient's address, and she has promised to let me know from time to time how she gets on. She has gone to reside in a purer atmosphere with her parents. I have directed that she should take occasionally an aloetic purge, composed of aloes, hyoscinus, and colocynth. I have given her also the compound steel mixture, with a small quantity of castor. This she is to take regularly, and I have directed her to apply to an intelligent medical man in the neighbourhood, who will modify the medicine, from time to time, according to the symptoms. I trust and think that I shall be able in a short time to report to you favourably of this case, and so of confirming the views I had taken, showing how much, first of all, the peculiarity which is denominated "hysteria" puts on the semblance of

local disease, and, again, how much the general health has to do with the continuance of local affection, whether sympathetic or real.

CASE 3.—*Complicated Disease of the Knee-Joint.*—There are two other cases in the house at present, which afford proof of further extension of disease of the knee. One is a man named Richard Gifford, a sailor, who has partial anchylosis of the knee-joint, a man of intemperate habits, aged 47. He was admitted into Abraham's Ward, on the 19th of November. He states that at about the year 1819, sixteen years since, while at sea, he received a severe blow on the outer side of the knee-joint, from the fall of a block. Much pain and swelling followed the injury. He was obliged to discontinue work, and then he obtained admission into the *Bermuda Hospital*. Blisters were frequently applied, and blue ointment was rubbed upon the surface of the joint, and under this treatment the swelling gradually disappeared. He left the hospital as cured, but there remained stiffness of the joint. From that time till about two years ago he suffered but little, except from stiffness, when the joint, without any apparent cause, began again to swell, and was very painful, particularly at its outer part. He got admission into the hospital ship, the *Dreadnought*, lying in the river, and in about three months he was discharged as well. The stiffness of the joint, however, increased, and in about two months after this the affection again came on, and then he was admitted, complaining of a dull aching pain in the left knee, not referable to any particular spot. It was much increased during the night, and on pressing the head of the tibia against the condyles of the femur, an acute darting pain was experienced, particularly at the anterior and inner part of the joint. The condyles of the femur were somewhat enlarged, and the motions of the joint very limited. There was slight power of flexion and extension. He cannot bring the limb perfectly straight, nor can you carry it far back. The pain was not particularly severe during the day; it seemed to extend up as far as the great trochanter, and along this course there was some slight tenderness. The limb was a little wasted. The secretions were natural, and the general health good. Upon examining the joint, I should say that there was evidence of there having been destruction of ligament, from the deposition in those parts. The head of the tibia was rather sunk,—approaching to the posterior part of the condyles of the femur. This could not have taken place without there being ulceration of the posterior ligament, perhaps of the crucial ligaments.

21. The pain in the knee was found to have extended more towards the femur; it was very trifling on pressure upon the thigh-bone. Complains of some soreness about the condyles, much increased at night.

29. Much the same; can bear pressure on any part of the joint, except on some part of the inner condyle.

December 2. More pain in the joints and at the inner part of the condyle; rest at night much disturbed; the appetite remains good; bowels slightly constipated, but regulated by the house medicines. Repeat the blisters. Not much alteration since the last report; if anything, tenderness rather diminished.

Remarks.—I believe that in the first instance, that, from the description given (which, however, will hardly enable us to decide accurately), he had probably had inflammation affecting the ligament and the synovial membrane. He describes the pain to have been very great, and the swelling very considerable, so that he could not continue his work. In the *Bermuda Hospital*, probably from the active treatment that was then adopted, the disease was checked before proceeding to the extent of suppuration, so as to form an aperture by ulceration. But in consequence of the destruction of ligament, of the synovial membrane, and of the cartilage, the articular surfaces became united by granulations, and then again the granulations were prevented from becoming ossific by submitting the part to slight motion. This is not an uncommon termination of diseases of the joints; rarely, however, does it reach, in the knee-joint, this termination, because when suppuration occurs, the constitution suffers so much that the patient sinks under it.

We have, however, specimens here to show to what extent the disease may go. Here is one in which you will see the joint nearly obliterated, and the condyles of the femur united to the head of the tibia by ossific matter. Here is another preparation, in which you will see the head of the tibia resting on the anterior part of the condyles of the femur. In this instance dislocation had taken place, in consequence of ulceration of the ligament, the synovial membrane and cartilages, and the man's foot had come forward, so that the anterior part of the tibia was at right angles with the anterior part of the thigh-bone. In that position union took place, even to the extent of ossification, as you will see by the preparation. Now in the case of which I have just read the particulars to you, there has been very slight alteration from ulceration, and why I say there has been *ulceration* is, because the head of the tibia has separated a little from the condyles of the femur. The patient lay in bed, with the limb supported on a pillow, which allowed the tibia to pass backwards. This is, however, better seen with reference to a case which I will now read to you.

CASE 4.—*Inflammation, ulceration, and destruction of ligaments of the knee-joint.*—Samuel Ruffles, aged 24, residing at Blackheath, a porter by occupation, of regular habits, was admitted into Abraham's ward on the 1st of October, 1835. He states that when about seven years of age he had some slight affection of the knee-joint, arising from a blow he received at play. About Christmas, 1834, he fell with some violence on this knee, and the accident was followed by considerable pain and swelling, so as to oblige him to discontinue his work. Leeches were applied to the part, and he remained pretty well, occasionally suffering pain in the joint. At last the pain became so severe, and the joint so much swelled, that he could no longer use the limb. After some time an opening formed of its own accord by an ulcerative process of the inner side of the leg, about two inches above the joint, which gave exit to a large quantity of pus, together with synovial fluid. Upon his admission he complained of severe pain in the knee on pressure, particularly at night; the tibia was partially dislocated backwards, and the head of the tibia was also somewhat enlarged. The wound discharged a healthy pus, the limb was much wasted, the rest at night disturbed, but the general health, considering all things, pretty fair. He was desired to take the compound rhubarb powder, consisting of rhubarb, soda, and calumba, and three grains of the sulphate of quinine in infusion of roses, and he was to take half a grain of muriate of morphia, to procure rest at night, and half a pint of porter a day, and he was placed on the house diet. A moxa was applied to the outer side of the joint, the knee was to be slightly flexed, and supported on a pillow to allow the condyles of the femur to sink backwards.

Oct. 8. The moxa discharges freely; pain less; sleeps better, but slight motion of the oint produces great uneasiness.

14. The condyles of the femur appear to have recovered much of their natural condition, but still, at the joint, there is a darting pain occasionally. On the whole, the general health is improved.

21. Complained of no pain except on motion, moxa discharged freely; the wound on the inner side of the thigh produced a discharge of healthy pus. The size of the knee is diminished; rest good. I desired now that the leg should be placed on a swing box, which would give him more facility to move in bed, and at the same time allow the condyles to sink backwards.

26. Has had much pain since the leg was placed in the cradle, and but little rest in consequence. A slight swelling is traced on the inner side of the knee.

30. Suffers very considerable pain; the swelling was increased.

Nov. 2. There being fluctuation, an opening was made to give exit to a quantity of healthy pus. This relieved the pain, the condyles of the femur still slightly project forwards, but not so much as when placed in the cradle.

11. The wound on the outer side of the joint discharged freely, no pain in the knee, pressure over the joint does not produce pain, sleeps well at night, and general health good.

18. Discharge from the wound less, in other respects much the same.

24. Is still doing well.

December 1. Is free from pain, the wound on the outer side of the joint is healed, that on the inner part discharging pretty freely; the general health remains good. A small sore is formed on the heel from pressure. On the 7th, three days ago, he was improving and gaining health and strength.

Remarks.—In this instance the case is rather more clear, showing injury at an early period of life, producing chronic inflammation of the ligament. He recovers from the first attack, and then, by further violence, gets a more severe form of it, quickly running from the adhesive stage to the ulcerative. Great swelling immediately takes place, great disfigurement ensues, the ligaments are soon destroyed by the ulcerative process, and unless care be taken, they quickly separate from their attachment, and the articular surfaces become dislocated. That has been the case in the preparation on the table, and to such an extent as to produce a deformity that would be hardly credible. I have seen several instances of this kind in which the tibia has been dislocated backwards in this way upon the femur. That could not place without destruction of the lateral ligaments, the posterior ligaments, and the crucial ligaments. At this time the disease has extended also to the synovial membrane, and the cartilages, which have been destroyed in the process of ulceration. The extent to which suppuration takes place in these instances is very various. Sometimes you will have the destruction of cartilage, of the synovial membrane, and of the ligaments, with but little apparent formation of matter, as in the case of Gifford. In that case there does not appear to have been suppuration to any extent, and no external aperture was formed, and he got rid of the severe state of the disease under rest and counter-irritation. But at other times you will find the formation of matter very extensive, as in the instance of the man Ruffles, where the matter formed in the cavity of the joint, and then discharged itself through an opening formed by nature. At this time the constitution suffered much, for when the disease goes on to ulceration to any extent, constitutional irritation is produced of a sympathetic kind, and often of a most severe description, so that the cases we get of this kind in the large metropolitan

hospitals, more frequently require to be removed to get rid of the source of irritation to save life, than to attempt to cure them otherwise, as in this patient. When I admitted this man Ruffles into the house, there being an opening communicating with the joint, there being partial dislocation, and strength below par, I was doubtful whether I should not have to remove the leg, but he has gone on so well, under good diet and careful attention, that I have no doubt now of the ultimate favourable termination, unless the healing process is disturbed by some accident; we shall get the granulations perhaps to inosculate, and then be able to use passive motion. This will depend, however, on the closure of the wound into the joint, for so long as that wound exists, it cannot be right to use passive motion, because we may increase the injury by it. But as soon as the external wound is closed, passive motion may be resorted to, and he will then get some use of the joint, perhaps to the extent that the man Gifford has, and perhaps a little more. These cases will then show the greatest extent of disease compatible with the safety of the limb.

We have thus seen the knee-joint affected, and the synovial membrane liable to be diseased, as well as the articular extremities in their cancellated structure, and the ligaments, but more particularly the internal and the posterior, in which case the disease of the ligamentous structure extends to the synovial membrane, and the cartilages beneath become destroyed. The articular surfaces are removed, a new deposit takes place, which unites the osseous extremities of the bones, sometimes by fibrous matter and sometimes by osseous matter. These cases, which proceed to an extreme degree, rarely do well, in consequence of the difficulty of maintaining sufficient power in an atmosphere like this, but the cases I have cited are exceptions to the general rule. I have not at present any other case of interest of this kind in the house, and as we have now followed this subject up in three lectures, I shall go to another subject when next we meet.

A TABLE, published in Dr. Lombard's work on the influence of professions on pulmonary consumption, shows that, of all the circumstances enumerated, the most hurtful to the lungs is the inhalation of mineral and vegetable emanations, which vitiate the air of localities. Next, but at a great interval, come bodies floating in the air. Next, the most active causes in the development of consumption are, the want of muscular exercise, and habitual residence in manufactories. In the fifth place comes hot dry air. Lastly, the trades which require a bent position, or great motion of the arms.

ST. THOMAS'S HOSPITAL.

CLINICAL LECTURE

ON A CASE OF

SIMPLE FRACTURE OF THE LEG, FOLLOWED BY GANGRENE.

Delivered in the Session 1835-36.

BY MR. GREEN.

THIS morning I shall address to you, gentlemen, some observations on a case of simple fracture of the bones of the leg, which was followed by gangrene, in a case that was admitted on the 6th of October last. The patient was Charles Hayling, aged 47, a flour porter, of good stature, and muscular, though not bulky. He had been a gin and porter drinker; latterly, however, only taking porter on account of a cough. I do not know, however, whether, to cure the cough, he took the porter, or left off the gin, but he had had a cough for some time. In other respects he said he was temperate in habits, and not accustomed to intoxication. While standing on the step of a door, a brewer's dray was suddenly pushed back, and jammed his right leg between the wheel and the step. He was immediately brought to the hospital, where it was found that the tibia and fibula were fractured, with comminution, at about the middle of the leg. There was considerable effusion around the seat of the fracture, and a small wound on the outer side of the leg, not however communicating with the fractured portion of bone, so that the injury came within the description of what is termed a *simple fracture*. There was also some grazing of the skin; and a remarkable fact is stated by Mr. TREW, under whose care the case came. No pulsation could be felt in either of the tibial arteries at the ankle. Now this, in connection with the subsequent circumstances, is a fact worth notice. The knee was half bent, and placed on the side, and, though there was not much bruising, on account of the swelling and tension, the leg was wrapped by Mr. TREW in flannels steeped in hot fomentations. The bruising I was informed was not very considerable, though there was so much swelling and tension as to render it advisable, in Mr. TREW'S opinion, to apply fomentation by warm flannels.

In the evening of the next day, the 7th of October, he complained of great pain in the limb, and appeared rather delirious, wishing to get out of bed, and speaking sharply and rather incoherently. Still his mind was easily recalled, and he answered questions very satisfactorily. The limb had become much more swollen, and the discoloration

was increased, both above and below the fracture. There is also some swelling about the knee; the foot is cold, and much less sensible than natural. Fifty drops of the tinctura opii were given to him in the evening. Thus we already see that on the very day after the accident, a change had taken place, which was very unfavourable. You will observe that the sensibility of the foot had become diminished, and the power of sustaining its natural temperature was much lessened, and that this was accompanied with constitutional irritation; at any rate some disturbance of the nervous system had occurred, which was to be regarded as an unfavourable sign.

The circumstances bring to my mind the case of a man, which indeed has been published, with a compound fracture, in which at the end of about ten days, when the patient seemed to be going on favourably, violent hemorrhage took place, and it became necessary to amputate the limb, though the condition of the patient was very unfavourable. Indeed, stimulants were essential to bring him to bear the operation, and yet its necessity was absolute, for the loss of a very small quantity more of blood would have destroyed the patient, as we could not get at the artery. The patient being of a healthy and robust frame, and the loss of blood apparently the only cause of the depression, I injected several ounces of blood into a vein at the bend of the arm, and the man, in consequence, revived uncommonly, took nourishment, and seemed to be going on well; but on the next day he altered and was sinking. I repeated the transfusion, but without any effect. The first untoward symptoms were, restlessness, and a desire to get up, but he was easily quieted; still when left to himself his mind wandered. What change could have induced the latter symptoms which he exhibited? It turned out afterwards, that mortification had occurred on the face of the stump, and I do not in the least doubt but that it was this which caused the first symptoms, and also prevented the second transfusion from producing good effect. The mortification may have been partly the effect of the great loss of blood reducing the powers of the system below the requisite condition to sustain vitality, followed by the infliction of such an injury as amputation. Mortification of the stump took place, which we failed to overcome.

To return to the case before us. The foot was observed to be cold. Opium was given in the evening, and it was thought well to envelop the whole limb in a poultice.

Oct. 8. The patient is much easier. The opium had produced him a quiet night. Bowels regular; his general health unaffected. Perhaps you will think this rather too strong an expression after hearing that the pulse was 110; however, the appearance of the man justified the remark. His countenance was good, his complexion bright, his lips and eyes were natural, and he said he was very comfortable; so that I apprehend that some who may have stood by his bed, might, when his limb was covered up, on simply looking at his countenance, and hearing him speak, have said there was really nothing the matter with him.

The report goes on to state that his pulse was 110, rather full, and not wanting in power; tongue clean; skin warm and moist; perfectly sensible. The peculiar wandering has gone off; it was a very remarkable symptom. The leg is now more discoloured, as if it had been severely bruised. The foot exhibits many large patches, and a bluish red colour on a perfectly white ground. There is œdema about the ankle, and much tumefaction about the lower third of the thigh. The skin of the thigh is very hot, but not discoloured. The superficial veins of the thigh are remarkably charged. There is still the same want of sensibility in the foot, and an absence of pulsation in the tibial arteries. It short it became perfectly distinct that gangrene was taking place to a considerable extent; but it was remarkable that the system generally bore the injury so well. It seemed at that time scarcely to have taken the alarm. It is remarkable, I mean, as an unfavourable symptom, for very commonly you will find that where the system does not take the alarm, when there is sufficient cause for alarm, there exists some cause which is likely to interfere materially with the patient's recovery. It has been noticed, — and I think there is some ground for the observation, though it is difficult to come to any very decided conclusion upon a point where the instances must take place under such varied circumstances that one cannot feel justified in generalizing with great confidence, — but it has been observed that persons who do not complain much at the time of undergoing an operation, but bear it apparently perfectly well, often do very ill afterwards. This fact seems in some degree to bear upon the case now before us. Here was a patient in whom, although there was quite sufficient cause, from incipient gangrene, for violent irritation of the system, yet the system seemed to be unaffected. I saw him on the 8th, which was the third day, and I well remember, as mentioned in the report, that while the appearance of the limb was gangrenous, his general health was unaffected.

Well, I had to make up my mind as to the treatment. Although, in some respects, of a favourable constitution, yet the man had, beyond doubt, been far more addicted to the use of spirituous liquors than was calculated to render him a favourable subject for the consequences of such an accident. Here was incipient gangrene, connected with a contusion, and I had to con-

sider two things; first, whether, under any circumstances, it would be proper to amputate at this period; and, secondly, whether, considering that in this particular case there was gangrene, and a destruction of parts to follow, which it was scarcely possible he could survive, yet his general health being still unaffected by it,—whether, by removing the source of irritation by amputation, we might not prevent the subsequent derangement, and the probably fatal constitutional effects which were likely to arise without that operation? I might say that a third point presented itself to my mind, which, though it did not bear very importantly on the treatment in connection with the other two questions, yet is worthy of notice, and that related to the cause of the gangrene. The limb was so jammed by a cart-wheel as to produce a severe contusion; and there was a good deal of swelling after the accident, but still, according to the report of the appearance of the leg immediately after the accident, it did not appear even probable, still less certain, that the gangrene was entirely produced by the local injury. There was no appearance, on admission, of the parts being so crushed as certainly to evidence the cessation of their vitality. Therefore, the question might very well be asked, What was the cause of the gangrene? Doubtless, the bruising was one cause; but it seemed probable that there was something more. One naturally asked then, Is any main artery so ruptured as to cut off the supply of blood? I called your attention to the fact, that there was no pulsation in either the anterior or the posterior tibial arteries; but if, for instance, there had been rupture of the popliteal artery, that might have explained the want of pulsation in the arteries at the ankle, but not, with certainty, the occurrence of mortification.

I recollect the case of a young gentleman, who, in riding a race, struck his knee against a tree, and fractured both bones of the leg. The limb immediately began to swell, and so continued until it was swollen to a prodigious size. The surgeon in attendance was utterly at a loss to account for this extraordinary swelling. The patient was treated in the usual way, and after the usual lapse of time at which a fracture might be supposed to be united, it was found that the union had not taken place. He was placed on Mr. Amesbury's fracture apparatus, but with no better success, the swelling did not go down, the fracture did not unite; inflammation, suppuration, and abscess, supervened, then came on a bleeding, and then it was necessary to amputate the limb. And the cause of all this was ascertained to be a rupture of the popliteal artery, very close to the posterior tibial, probably produced by the blow on the knee. Now gangrene did not take place in that case; and I have known one or two other cases of ruptured arteries where gangrene did not supervene. Nature may fully provide for the supply of blood to parts when arteries are ruptured, by anastomosing branches. But there was no pulsation in this case in the tibial arteries. How came that? Was there any coagula in those vessels, the consequence of the severe blow? I am not acquainted with any facts which will warrant such a supposition in such a case, but there is a preparation on the table, taken from the Museum, in which you will observe a clot in the brachial artery; and I recollect having heard Sir Astley Cooper speak of this case as one in which the mortification of the limb (for the arm mortified in this instance) was supposed to be dependent upon the formation of that clot; but I do not know any further particulars of the case than those which I have detailed to you. We may readily suppose that where an obstruction to the circulation takes place by means of a coagulum, an insufficient supply of blood will be distributed to the parts below, and that obstruction may be the cause of the mortification.

But no such circumstances were found to exist in this case; there was no rupture of the artery, no coagulum, no little specks of coagula here and there, as you might have expected. The vessels were empty; nothing obstructed the circulation, nor was there any thing in the history of the case, or in the after examination of the limb, sufficient to explain the very interesting and important fact, supposing it to have been accurately ascertained,—and I do not doubt (considering what Mr. Trew has stated) that it was thoroughly ascertained,—that there was no pulsation in the tibial arteries. Whether that was connected with the gangrene, in the relation of cause or effect, I am unable to say.

Let us return then to the questions; First, Would it have been proper to amputate under any circumstances? Secondly, Whether in this particular instance it was proper to amputate at that time.

With respect to the first of these questions, surgeons, I think, are still in some doubt whether amputation should be performed (gangrene having taken place) before a line of demarcation occurs. Most of them have agreed to wait for that line of demarcation, in opposition to the opinion of the older surgeons, that amputation is a remedy against the spreading of mortification. Indeed, I think ample experience has shown that if you amputate during spreading gangrene, under ordinary circumstances, mortification of the stump generally takes place, and you gain nothing by the operation. But, certainly, we do not want cases showing the propriety of operating at another time, and there are individuals who have adopted the opinion that where mor-

tification arises purely from local causes, and is dependent upon circumstances entirely within the part, you may amputate before the line of demarcation has occurred. Instances might be adduced where this plan has been successfully resorted to. Thus in a man who was admitted under the care of Sir ASTLEY COOPER, mortification had taken place from aneurysm in a vessel of the arm, and Sir ASTLEY amputated without there being anything like a line of demarcation. There was a case of simple fracture in this hospital, in a maniac, who, being troublesome here, was sent to the parish house, but with the arm properly bandaged. But he succeeded in removing the splints, and mortification took place. Amputation was there had recourse to while the gangrene was still extending; and it did not reappear in the stump, but the man did perfectly well. Taking all things into consideration, we may perhaps say, as a general rule, that it is proper to wait until the line of demarcation has shown itself; while, at the same time, there are certain cases where you may amputate previously, supposing the mortification to arise from a cause which is entirely within the part and only relating to that part. Have a care, however, that the exception which you make to the general rule shall be perfectly in point.

And now, to come to the next question, whether, in the particular case before us, amputation should have been performed, although the system was not affected, and although the mortification might have been referred to the precise spot implicated. But I was very much in doubt whether the mortification could be referred solely to the local injury, and I am inclined still to think, though the issue of the case is before us, that such was not the case. The man was a great drinker, and perhaps, though I have no means of exactly determining the point, some alteration had occurred in the state of the large vessels. He certainly did not appear to have any disease of the heart, yet there might have been such an alteration there or in some of the large vessels as would produce a change in the circulation. It therefore appeared to me exceedingly doubtful, to say the least of it, that the mortification depended solely on the local injury. However, his appearance on admission being good, and not such as indicated that mortification was pending, I considered that we should give him a better chance of recovery by waiting until the parts should be in such a state as would allow the amputation to be safely performed, so far as regarded the prospects of healing, and until such symptoms appeared as would render the operation imperative, but which did not exist at the time I was considering these matters.

On the 9th of October I found that he was not so well, and had lost his appetite. He had slept tolerably well during the past night, except when disturbed by shooting pains in the leg; the limb was more generally bluish, and a part of the skin above the injury presented rather a reddish hue, as if there was some token of separation. On the outer and back part of the limb there were several small vesications containing serum. The bluish appearance gradually subsided into the natural appearance, upon the thigh. The tumefaction had not increased, but the swelling extended to the upper third of the thigh, and there was a curious sensation in the femoral artery, as if air had been diffused through the cellular tissue. The other parts of the thigh had a doughy feel, but did not pit on pressure. Pulse 108, rather jerking, but not capable of sustaining pressure. The tongue was slightly coated; the bowels were regular. I omitted to say before, that as his habits had led me to infer that his strength could not be supported without his accustomed stimulant, I ordered him four ounces of gin daily, and full diet, directing the dresser to watch for any febrile symptoms, and then diminish the quantity of both, in order that the actions of the system should not be roused into tumult.

On the next day the quantity of gin was ordered to be increased to six ounces, with a little port-wine mixed in sago or gruel. I think it makes a great difference, whether stimulants are mixed with food or not. In food they do not seem to exert the same influence in rousing the action of the heart; they do not have the immediate effect of diffusive stimulants, for they are not then so concentrated.

On the 11th it appears that he had slept well during the former night. He was without any appetite. The state of the limb was not much varied. The foot was more bluish, but had some little warmth and sensibility remaining. The leg was dark blue. The thigh was emphysematous, and rather bluish; pulse 104; tongue whitish; bowels relieved last evening.

12. The report states that he did not sleep last night, in consequence of much sharp pain extending down to the foot. There is considerable vesication on the leg, on the outer side especially; but little sensation below the ankle; the swelling of the thigh has increased since yesterday, and now extends to the groin; the whole is emphysematous; no line of demarcation; pulse 100; tongue clean; bowels regular; skin comfortable; appetite good. It was thought that advantage might be gained by using some other stimulant, and five grains of the carbonate of ammonia, five minims of the tinctura opii, and fifteen minims of the tinctura hyosciamus, were ordered every three hours, after a consultation with Mr. TRAVERS.

13. He slept tolerably well; gangrene

more diffused, but no distinct line of demarcation; the crepitation has increased; pulse 108, full, and tolerably firm; tongue whitish. Ordered a mutton-chop daily.

14. I made to-day three incisions, each about two inches in length; one on the front, one on the outside of the leg (both through the living and the dead skin), and one on the outer side of the thigh, in consequence of his having experienced a good deal of pain, which seemed to me to originate very much in the tension of the parts. I also thought it probable that there might be some matter or sloughs under the skin.

15. Much relieved from pain by the incisions, and feels better. The line of separation has commenced on the outside of the leg.

16. Had no sleep last night, from great pain in the middle of the leg. There is a slight sensation of fluctuation just behind the middle of the leg. I passed a lancet deeply into it, but no pus escaped. The discoloration of the leg had not extended; pulse 108.

17. Passed a good night, but his constitution is now beginning to suffer. The cheeks have a patch of pink on them; skin hot and dry; tongue dry in the middle, with moist edges; pulse 116, full, and irritable; bowels open. He has become thinner, but is in less pain. The separating line is still proceeding. The leg, just below the knee, is extremely sensible when pressed upon, and the emphysema now spreads over the whole front of the thigh, which is more swollen.

18. Much the same; pulse 118, jerking. The lower part of the leg is now quite black. An irregular line marks the boundary of the gangrene.

19. Slept tolerably well last night, and is in less pain, but his features are beginning to shrink, and there is more hectic flush upon his face; pulse 120; pain diminished; and the line separating the living from the dead parts has slightly commenced. There is a plentiful but thin discharge from the thigh.

20. The separating line is now quite distinct; he slept very well last night, but his powers are beginning to flag; pulse 120, jerking, and very easily compressed; bowels regular; appetite impaired.

21. He wandered much during the night, but towards morning became sensible, though his manner is rather hurried; he is evidently worse than he was yesterday, and to-day it was determined to amputate, as affording the only chance of saving his life.

21. I now found the appearance of separation much more marked, though not even at that time presenting a distinct line of demarcation, although ulceration had taken place; but the line of separation was not well defined throughout the limb. At this time it was quite evident that his powers were decidedly sinking, and perfectly obvious that they were unable to carry him through the process of separation of the limb. Accordingly the amputation was performed at 2 o'clock on the 21st. The skin and cellular tissue at the back of the thigh were full of adhesive matter, and glued firmly to the fascia. Pus escaped on cutting through the muscles. There was rather more venous blood than usual lost, and he became rather faint. Brandy was administered, but he appeared sinking. Three ligatures were applied, and a strap of adhesive plaster was used, *pro tempore*. He was taken to bed and a drachm of tincture opii was administered. I remained with him for some time after the operation, for he certainly was in a state of complete depression from the operation. It was evident that the system had received a very severe shock, and though the quantity of blood lost during the operation was not very great, yet I apprehend that it was very sensibly felt. There was one symptom which you will often see in persons who have lost a good deal of blood, an anxiety about the breathing, as if there was a difficulty in filling the lungs, a restlessness, a turning from one side to the other, a gasping with the mouth, and, withal, considerable depression. However, I left him, with directions that he should be supported as far as possible. Diffusive stimulants were given *ad libitum*, in order to keep the powers of the system going until, if it was possible, a reaction might take place, and some symptoms of restoration should appear. At seven o'clock, having taken brandy twice, he was still very low; the pulse was very quick and weak, but yet he rallied after each administration of the brandy-and-water. The stump had been dressed, and there was but little oozing from it. Still, notwithstanding all these means for rousing the system, he died at half past nine o'clock on the same evening, without having exhibited the slightest appearance of reaction, although by that time he had taken nearly half a pint of brandy. An attempt was made to give him forty drops of the liquor opii in a camphor mixture, a short time before his death, but only a very little of it could be got down.

Then came the examination of the limb, but I am sorry to say that there was no examination beyond that. I wished to look at the heart and great vessels, but the friends would not allow it. It was found that a triangular portion of the tibia had been detached and driven backwards, being in close connection with, though not pressing on, the posterior tibial vessels. Three inches below that, the bone was surrounded by a considerable portion of lymph. The arteries on being slit open appeared to be healthy, and contained but little fibrine. The muscles on the other side of the leg also seemed to be healthy. The fibula was fractured obliquely, immediately below the outer mal-

lecius, a considerable way below the fracture of the tibia. On cutting into the knee-joint, bloody matter escaped, and the cartilaginous substance was a little disorganized.

Could any other plan of treatment have been adopted in this case, with a better chance of saving life? Was any thing omitted which could have contributed to his recovery? Really, on reviewing the circumstances, I am not aware that a different plan could have been adopted. The man was intemperate; he had received a severe contusion on the leg, accompanied by fracture; and, apparently, partly from the contusion, and partly, perhaps, from the state of his circulation, induced by his habits, gangrene occurred. Had amputation been performed when first the operation suggested itself, the probability is that gangrene would have taken place in the stump, or that the patient would have died from the effects of the operation, as he did at a later period. The plan of treatment consisted in supporting, without rousing to tumultous excitement, the powers and the functions of the system; and they were tolerably well sustained until the parts began to separate, when the aspect of the case was not at all favourable; and although the line of demarcation from adhesive inflammation, had never been completely formed, the actual separation of the dead from the living parts only took place partially, and, in the course perhaps of a few hours, the patient began to pass into that state which Mr. HUNTER so expressively called "symptomatic of dissolution" produced under an overwhelming injury. Under these unfavourable circumstances amputation was performed, when it could no longer be delayed, but, unfortunately, the state of the system during the amputation, combined with the shock of the operation, produced the unsuccessful result which we have to regret.

DIAGNOSIS OF DISEASES OF HEART.

ON PALPITATION,

NERVOUS, PLETHORIC, AND SYMPTOMATIC.

By JOHN FOSBROKE, M. D., *Physician to the Royal Dispensary.*

THIS is so prominent a symptom of affections of the heart, that the physicians of yore lumped together all diseases of that organ under the term "palpitation," just as I have known some modern professor or other doctor relieve himself from all manner of perplexity, by conferring the title of "Morbus Cordis" upon every puzzler that came before him. Our approaches to precision in the knowledge of diseases of the heart have not been very ancient. Dover says, that the old apothecaries, who "always described diseases in the fashion of the day," had it "at one time, that every body died of polypus of the heart, but being laughed out of the polypus, mortification of the bowels came in fashion; and, when a patient was dead, the surgeon was paid to make out the disease incurable." Dr. Parry will stand high in the estimation of the profession, so long as that man is considered the greatest physician who collects the most facts, and reasons best on those facts; but he blended together hypertrophies and dilatations under the general term "enlargement," giving here and there some distinctions between the two in the course of description. Mr. Abernethy went nearer to the wind, and knew, in a general manner, the two brief differences of thickening and dilatation, and attempted to distinguish these, and almost all diseases of the heart, by the pulse. I remember him, in his striking and facetious lectures, talking of "aggrandizement of the heart's substance, being attended with aggrandizement of the heart's action, a pulse vibrating like a cart-rope, and increase of the heart's bulk by dilatation, with diminution of its action. Where the action is increased, the heart is enlarged in its diameter, the carotids pulsate, and both those arteries are dilated, to carry off the quantity of blood forced upon them. Ossifications, strictures, and contractions of the annulus venosus, are attended with an extremely weak and quick pulse. And for why? the arteries are fully supplied with blood! Because it cannot make its way through the contracted heart. They interfere with muscular power, diminish the heart's contractions, and give rise to a pulse scarcely to be felt, and to pain in the part." (*M.S. Notes of Anat. Lect. on the Heart, by J. F.*) So talked Mr. Abernethy, and practitioners continued for some time to discriminate diseases of the heart through the pulse, like the Chinese, who pretend to discover all diseases through the same medium. I apprehend it is no better guide in the one case than the other.

Beddoes says, that John Hunter did more for the advancement of medical science, than the whole University of Edinburgh, from the time of Monro and Cullen to his day, and, if he had had more candour and fewer Oxford prejudices, he might have said, than all the medical corporations and schools in Great Britain.

Since Hunter, the French have advanced farther in his footsteps, than those eminent egotists in England who have been his pupils, and have his name always on their lips. It was reserved for the French to throw a broad flood of light on diseases of the heart, and to draw the line, with beautiful precision, between hypertrophy

and dilatation, and to show their various causes, combinations, and distinguishing characters. "The French," says Dr. Armstrong, "attend very much to, and connect very accurately, the symptoms and pathology of diseases; and, generally speaking, their diagnosis is past comparison better than ours; but they seem as if their only object was to find out the disease, without any reference to its relief or cure, for their treatment of disease is most miserable." Truly enough, their treatment of acute disease has been miserable, comparatively, with our own, but they have had different institutions, and, since the ridicule of Moliere, strong prejudices, to deal with. In this respect they appear to improve every day, and in the treatment of chronic diseases, I am disposed to think they are advancing beyond us in the extent, minuteness, and correctness, of their therapeutical experiments. But, whether our inferiors or equals in treatment, they have supplied ourselves and all Europe with that whereof we lacked most grievously. "Among physicians, equal in other respects, those who are brought up to distinguish internal affections with accuracy, must always be superior. There is almost as much difference, in the cultivation of this fundamental talent, between some of our schools and that of Paris, as between the chemistry of Glauber and that of Lavoisier. Such a foundation being once laid, the proper structure may indeed not be raised upon it. But no other foundation is fit to receive the edifice of medical knowledge; without it, the superstructure must be both irregular and unsubstantial" (*Dr. Beddoes*).

It appears to me, from what I saw when I was studying at Paris, and from the tendency of the clinical observations in their publications, that they so much value the study of "organic medicine," by which they mean diseases arising from changes of structure, that they pass over the more numerous diseased actions which depend merely on changes of function, as almost unworthy of regular application, because they are more uncertain, bewildering, and conjectural. In this country, we are bound to attend to them, because they form the chief part of our practice. Medicine means, in England, the "Sick Trade," and the pride of science is nothing in comparison to the pride of money-getting. Mere physiological derangements form the staple of this trade, and men explain them in books by a hundred different theories; and sometimes a man, by spinning a cobweb, containing scarcely an iota of truth, catches fools enough to make a fortune. I think that the French are actuated too much by the spirit of organic medicine in their inquiries into diseases of the heart. They look too exclusively at organic changes, thickenings, dilatations, obstacles, &c., and pass over, too indifferently, the morbid action which accompanies those effects, and arises from the influence of the circulating and nervous systems. My object is, therefore, to show how disordered vascular and nervous action affect the heart in both organic and functional disease.

I observed, in the last communication, that there were three kinds of palpitation, the *nervous*, the *plethoric*, and the *symptomatic*.

The original cause of *nervous* palpitation is, that the heart is the organ of the most universal sympathy (*John Hunter*). Irritability is variously bestowed, and variously appointed, in various parts of the body, but in all creatures the heart is the most irritable part (*John Bell*). It is the first organ that receives morbid impressions from the brain, when that organ and the nervous system are disturbed by the mind, or by physical causes. It is the part most directly connected with mental emotions. (*Drs. Haighton and Blundell, Notes of Physiological Lect., by J. F.*) What is more familiar than the different degrees of irritability and irregularity of the heart's action, which are produced by profound and protracted emotions of anxiety, grief, and despondency, or what more common than the sudden suspension of every commotion of the circulating system, and the return of a calm and placid state of the whole frame, when the influence of the depressing passions is removed?

The *plethoric* kind arises from the influence of the blood. Inasmuch as muscles are irritable in proportion to the supply of blood, and deprived of irritability, and even paralyzed, by the want of it (*Drs. Haighton and Blundell*), the heart, as it is supplied with a greater quantity of blood than other muscular structures, is endowed with the principle of irritability in a greater degree. *Secondly*, as the blood is the proper stimulus of the heart and the heart's action, it may be over-stimulated by the excess of its own blood (*Mr. H. Cline*). *Thirdly*, according to some, the exciting power is relatively increased, not only in proportion to quantity, but quality; that is, in proportion as the blood is fibrinous, as the clot is more than the serum (*M. Andral*).

The original cause of the third kind, or *symptomatic* palpitations, is the existence of any disease of the heart itself, or of any organ whatsoever, near or remote, capable of opposing an obstacle to the circulation (*Prof. Rostan*), or exciting sympathetic irritation of the heart. Alterations of the heart will often depend on impressions made by remote organs; in irritation of the brain, its motions are accelerated (*Prof. Macartney. MS. Notes of Pathological Lect., by J. F.*); it is liable, indeed, to be affected by derangements of the most minute structures,

for its sympathies are most extensive. (*Prof. Alison. MS. Notes of Clinical Lect., by J. F.*)

How are these three kinds of palpitation to be distinguished from one another? In so far as we are capable of discriminating them, it will generally happen that we shall be able to discern functional derangement from organic disease of the heart. Some may regard palpitation as a matter-of-course symptom; but upon a thorough knowledge of it, upon a comprehensive view of the several kinds, and upon a clear distinction between such as have a nervous, vascular, or symptomatic origin, not only an equal knowledge of heart cases must turn, but the practice also must frequently depend. Common nervous and symptomatic palpitations are of every-day occurrence; but are there not cases of mixed nervous and plethoric palpitation, which assume the characters of hypertrophies and other organic affections of the heart? and is it not a chief point to know all modes of distinguishing them, "for it is a great matter to be able to say whether there is any structural disease or not?" (*Dr. Macintosh.*)

1. Nervous palpitations have been great stumbling-blocks in the way of discriminating organic from functional derangement of the heart. Pathologists inform us that we shall know them by the following signs and circumstances:—

1. They are most readily excited in persons of a nervous and sanguine temperament (*Dr. Macintosh*); in persons subject to extreme mobility, of nervous and debilitated habit, and therefore in women more than in men (*Prof. Home*); and in young, nervous, and irritable persons of both sexes, in particular states of the brain and its connections (*M. Rostan*); in fact, in hysterical females, hypochondriacs, and persons called nervous (*M. Martinet*).

2. Under all these circumstances of constitution, sex, and age, the usual exciting causes of the disturbance of the nervous system and of the heart, are, moral affections, intellectual labour too long continued, losses of all kinds (*M. Rostan*), the excessive indulgence of various passions, stimulants, violent exercise, excessive depletion, the participation of the heart in the general disordered nervous action of the system in hysteria, chlorosis, and epilepsy (*Dr. Macintosh*); so that the principal causes are, mental or cerebral excitement, depression, or irritation.

3. They happen to persons who have experienced other nervous phenomena (*M. Rostan*).

4. They are at first slight and transient, and are at last reproduced more frequently by the heart becoming more irritable (*Dr. Macintosh*). When, owing to a particular state of the brain and its dependencies, they are augmented by moral causes, they are only instantaneous, they produce no profound alteration of health, and they supervene almost suddenly (*M. Rostan*).

5. The pulse is quicker than natural, from 84 to 96 (*M. Laennec*).

6. They are frequently most distressing when the body is in a state of repose, during the first part of the night, and often prevent sleep for many hours (*Same*).

7. There is sometimes a sensation of internal agitation, particularly in the head and abdomen; and, as in hysteria, the urine is copious and limpid (*Same*).

8. They are less troublesome, when the patient is taking exercise in the open air than at other times (*Same*).

9. The sound of the heart's contraction, though clear, is not heard loudly over a great extent of chest (*Same*).

10. Palpitation is without impulse; that is, "the head of the auscultator is not sensibly elevated, and by this circumstance it is distinguishable from the increased motion and shock of hypertrophy (*Same*).—*This is a doubtful observation.*—J. F.

11. They are known by the absence of the signs that accompany diseases of the heart (*M. Rostan*).—*Doubtful again.*—J. F.

12. Palpitations not depending on organic disease, more frequently affect the auricles than the ventricles, and the right auricle than the left (*Professor Home*).

I shall endeavour to show in what respects these phenomena, whether derived from the history of cases or stethoscopic signs, are true, or more or less equivocal. But beforehand, I shall state what constitutes that kind of palpitation which I have termed the "plethoric" in contradistinction to the "nervous."

Palpitations, in general, independent of organic disease, have been considered by most pathologists "a purely nervous affection." Dr. Macintosh observes that though he has never been obliged to open a vein or apply leeches, he "can readily imagine a combination of circumstances, which will render the one practice or the other advisable: for instance, in a young plethoric person, who is affected at the same time with some febrile movement." I have before observed that this notion of palpitations being so universally "a purely nervous affection," has been carried too far. I have seen enough to convince me of their occurring frequently from vascular engorgement of the cavities of the heart. I have also seen a double cause operating in the same case; a plethoric state of the heart blended with disordered nervous action. Some of those physicians who have compiled books on the practice of physic, have glanced at the distinction between the nervous and plethoric kinds. Dr. Parry, who was a very profound and logical inquirer into the diseases of the heart and circulation, saw that they arose from accumulations of blood in the cavities of the heart; and in cases attended

with pain in the left arm, resembling angina pectoris, he conceived that the existence of palpitation was a proof of the disease not being angina, but one of those anomalous affections which originate from blood being so accumulated. But he considered that the effect of the excess was not always the same. The first and most obvious consequence was to stimulate the healthy heart to inordinate action, which, after a time, was liable to be followed by a proportionate diminution of action, whence syncope and even death might ensue; on the other hand, another and immediate effect of such accumulations was to induce a more sluggish action of the heart's frequency and force, which has been observed in persons of full habit, and in the subjects of angina pectoris, during the time that the accumulation is produced by muscular exertion. He ascribed these two opposite effects of the same cause, to the difference of predisposition caused by different local causes,—fatness, extenuation or flaccidity of the muscular substance of the heart, ossification of the coronary arteries, or mechanical pressure on the brain, and certain narcotics, predisposing to torpor and retarded action of the heart, —to organic causes, as preternatural enlargement,—to acute causes, as inflammation, vascular fulness of the substance or internal membrane of the heart,—to chronic causes, as the irritability arising from want of bodily exercise, or, as he terms it, "defect of due exertion of the voluntary muscles," predisposing to inordinate action. To this last and most important observation he adds that the predisposition to over-excitability of the heart from fulness of blood, "accompanies that condition of constitution which is usually called 'nervous,' in which the heart is peculiarly disposed to be affected by the whole train of mental emotions."

Several cases which I have seen of late, and more especially the very important circumstances in the two by no means familiar cases of Gwynne and Howls, which will be given, fully bear out these two last important and correct propositions. They shed much light on the origin of palpitations, inflammation, and enlargement of the heart, and they bear out the evidences which I have had of mixed nervous and plethoric palpitations existing in the same case. Rostan observes that where there exists no organic lesion, a plethoric state sometimes causes palpitations more or less strong. Professor Home has noticed their concurrence, with a plethoric or inflammatory diathesis, and the necessity of treatment by blood-letting and low diet. M. Martinet also distinguishes palpitations arising from plethora and congestion of the heart, and lays down a system of treatment. Professor Andral, with the perspicacity which belongs to that consummate pathologist, has had a clear insight into this matter. Under the influence, he remarks, of a plethoric state, more blood being formed in the economy, and, consequently, a greater quantity being passed through the heart in a given time, an excess of action, and palpitations, may result from it, which may either disappear with the plethoric state, or, if they persist, at last produce hypertrophy, on the same principle that any muscle whatsoever will increase in thickness under the influence of violent exercise. Adding much more than this, he gives a striking case in a blacksmith, and points out what is exceedingly important, the manner in which vascular engorgement may be confounded, through the identical character of the signs, with enlargement of the heart from thickening, now known by the barbarous term hypertrophy. The forthcoming cases will illustrate these as well as other points. The more I have seen of plethoric palpitation, the more obvious has become its importance in connection with diseases of the heart, for the ultimate effects of such forms of palpitation do not always stop at mere palpitation. Dr. Parry ascribes to undue accumulations of blood, those anomalous affections of the heart which resemble angina pectoris. "Pain in the chest, more especially in the left side, stretching into various parts of the left arm, is common to all diseases in which blood is unduly accumulated in the cavities of the heart; and if, during the paroxysm, this motion of the heart is excessive, both as to force and frequency, producing what is commonly called 'palpitation;' that circumstance shows the disordered state to be of a different kind from that which constitutes angina pectoris."

Pathologists having seen angina (which above all other affections exhibits the tendency of the heart to spasmodic action) prove fatal without any organic lesion whatsoever, have decided that these changes are not the real cause. Indeed, we see preparations enough of ossifications and other structural changes, in museums of morbid anatomy, which were not only not fatal, but not indicated by symptoms during life. Professor Macartney thinks that no man has ever died yet of organic disease of the heart alone, but from morbid action supervening on morbid structure. Even death by ossification does not occur till the heart is excited, and morbid action added. No part, he observes, is so liable to be affected through the medium of the nervous system, by the mind, or the stomach, which throws light on the success of Mr. Abernethy's practice. (*Notes of Pathological Course, by J. F.*)

With these impressions, some pathologists regard even angina to be frequently the effect of "general plethora;" or, as Dr. Hossack of New York thinks, of "disproportionate accumulation of blood in the heart and large vessels;" or, in the words of

Dr. Forbes, who coincides with Dr. H., "a congested state of the heart and large vessels." Even Dr. Parry, in tracing out the causes and characters of angina pectoris, in a first-rate specimen of strong reasoning and critical powers, did not attribute the disease entirely to the effects of ossification of the coronary arteries, for he distinctly states that the symptoms show that accumulations of blood about the heart and large vessels, take place (*Dr. Macintosh*).

II. Plethoric palpitations may be known more or less by these circumstances:—

1. They are excited or increased by every kind of motion or exertion, especially by lifting the arms and exerting the chest, by ascending stairs and acclivities, and doing whatsoever hurries the blood through the heart and lungs.

2. They are increased by cold, moist, and foggy weather, or whatever produces chill of the body, and so forces the circulation from the exterior to the interior vessels of the body.

3. They are more persistent than nervous palpitations, and occur by day as well as by night.

4. They are often accompanied by pain and weight of the arms, and particularly of the left arm.

5. They are sometimes attended with throbbing and fulness of the vessels of the head and neck, and pressure about the throat and ears, particularly in going up ascents.

III. The third kind of palpitations, or *symptomatic*, are said to be of a more temporary nature than the nervous or plethoric (*Professor Graham*). They originate from the participation of the heart in the affections of every other organ, and exhibit the morbid influences to which it is obedient under undue excitement (*Dr. Blundell*). They accompany—

1. *Pericarditis*, in which both the palpitation and dyspnœa merely indicate sympathetic irritation of the heart (*M. Andral*).

2. *Adhesion of the Pericardium.* Mr. Hunter was of opinion, that when adhesions take place between the pericardium and heart, the patient generally recovers, but is troubled with a palpitation, irregular pulse, oppressive breathing, faintings, debility; and the name of angina is generally affixed to these symptoms; but if the inflammation of the pericardium approach to the suppurative process, it produces death. (*Mr. Hunter, MS. Notes of Lectures, by T. Creaser, M.D.*) Mr. Henry Cline, who paid much calm and patient attention to diseases of the heart and circulation, also thought that fluttering, from the frequency of the pulsations or contractions of the heart, with intermission of the heart's action, denoted inflammation of the pericardium, and adhesion of it to the heart. (*MS. Notes of Lectures, by J. F.*)

The late Dr. Baillie thought that adhesions in the bag of the pericardium were often a cause of an intermission in the pulse. Dr. Armstrong says he had seen several instances of such adhesions without intermittency, and thinks that Dr. Baillie was mistaken. Neither of these parties was altogether right or altogether wrong. Every symptom is equivocal, and occurs in other affections of the heart, and therefore the existence of such a cause can only be detected from the history of the case.

3. *Pressure of fluid in the pericardium.*

4. Chronic enlargement of the heart, *whether hypertrophy or dilatation*, distinguished by the signs peculiar to those affections.

5. *Ossifications.* Sometimes, but not invariably, a cause.

6. *Maladies of the aorta.*

7. *Pneumonia.* Known by the symptoms peculiar to that disease.

8. *Serous effusion into the pleura.* Similarly detected.

9. *Phthisis pulmonalis.* I shall refer to cases on this point.

10. *Accidental tumours developed in the lungs, or in the course of the great vessels.* Also a case in point.

11. *Ascites and encysted dropsy of the ovary.*

13. *Hemorrhages or excessive bleeding.* The palpitations are excessive, but the beat of the heart, though precipitate, is not strong.

13. *Hysteria.* On this combination I shall speak hereafter.

14. *Chlorosis.* So also on chlorotic palpitation.

15. *Hypochondriasis.*

16. *Amenorrhœa.* I shall give cases, illustrating particularly the "turn of life."

17. *Leucorrhœa.*

18. *Repressed cutaneous affections.*

19. *Biliary engurgement and liver affections.* A common cause.

20. *Enlargement of the thyroid gland, or neck wen.* Noticed by Dr. Parry.

21. *Affections of the stomach and bowels, above all other causes.*

22. *Gout.* Noticed by Dr. Armstrong.

Symptomatic palpitations owing to each of these different causes, are known by the signs of those maladies of the heart from which they originate; and, if they do not originate from the heart, by the absence of all the signs of structural disease of the heart (*M. Roslan*). It is certainly a very great assistance in diagnosis to bear this list in mind; but it is not invariably easy, with the most comprehensive knowledge of causes to boot, to detect the affection of which palpitation is symptomatic. Each of this score of causes in connection with palpitation, is a study of itself. The difficulty is increased when more than one of these causes is combined, and when indeed, two, if not all three kinds of palpitation, are complicated together.

I have prefaced some cases and abstracts of cases, by laying down general principles

in the foregoing manner, that their application to those cases, and their treatment, may be the better understood. What I wish to show is, not the structural and mechanical effect of enlargement of the heart by thickening of its walls, or dilatation of its cavities, contraction of its orifices, and disease of its valves, but the influence of morbid action through the nervous and circulating systems, both in organic and functional affections of the heart, which I think is either overlooked, or merely alluded to here and there, by pathologists.

Ross, Jan. 9, 1836.

CASES AND ARGUMENTS

ADDUCED TO PROVE THAT "GONORRHŒAL RHEUMATISM" IS

COPAIBAL RHEUMATISM.

To the Editor of THE LANCET.

SIR,—I should feel obliged by the insertion of the enclosed remarks in your excellent Journal. I am, Sir, your obedient servant,

FRANCIS EAGLE.

29, Poultry, Jan. 12, 1836.

CASE 1.—May 1, 1834. I was sent for to visit Mr. C. H., who was labouring under a severe attack of rheumatism in the left leg. There is tenderness at two points only—namely, at the anterior superior spinous process of the ilium, and along the dorsum of the foot. He gave the following history of his complaint:—

About two months since, having contracted a gonorrhœa, a friend prescribed for him a mixture of cubebs and copaiba, which he took for rather more than a week, when he experienced a severe attack of pain similar to the present. He discontinued the copaiba, and, with the aid of warm clothing and mild aperient medicine, got rid of the pain in a few days, and again had recourse to his copaiba mixture, when, on the following day, having a return of pain, he suspected that the copaiba had, to use his own expression, "something to do with it." He now left it off for a week, and the pain subsided as before, but on again taking the copaiba mixture, the pain for a third time returned. Fully convinced in his own mind of the connection of the copaiba with the production of the pain, he determined to try other remedies for the gonorrhœa and resorted to them with partial benefit for some weeks. Being, however, very much annoyed at the long continuance of the disease, he consulted an eminent surgeon, at the same time stating his objection to take copaiba in any form. His objection was overruled, and a compound copaiba mixture prescribed, which he took accordingly, but on the very day following, having taken but two doses, the pain in the leg and thigh returned with increased violence, accompanied by considerable fever and general biliary derangement, which compelled him to keep his bed, in which state I found him.

The treatment now adopted consisted in the local application of leeches, and the administration of mild aperients to improve the chylopoietic viscera, and although the pain had affected the parts for some weeks, more or less, my patient was perfectly well in sixteen days, and up to the present date has experienced no return.

CASE 2.—A young man, aged 27, messenger in a fire-office, whose habits of life were far from abstemious, perceived, on the morning following a debauch, a discharge of yellowish matter from the urethra, and immediately applied to a surgeon for advice. A copaiba mixture was prescribed for him, of which he took a dose three times a day. On the second day, however, all discharge having vanished, he discontinued its use, and went to bed rather unwell. During the night he awoke with considerable pain immediately under the left scapula, and on the following morning applied to me, when I at once advised the application of twelve leeches to the part affected, to be followed by a warm bread-and-water poultice, at the same time directing my attention to the state of the stomach and bowels, which were out of order, and in five days he returned to his office.

Remarks.—The belief that the rheumatism arising during a gonorrhœa is a specific disease, requiring a specific remedy, is, if I mistake not, founded upon a very shallow foundation—1st, that because it arises during gonorrhœa, it is gonorrhœal; 2ndly, that it is curable only by mercury.

At page 210 of Dr. Titley's work on "Diseases of the Genitals," speaking of this disease, he says, "That this form of disease sometimes, though rarely, occurs during the continuance of a gonorrhœa. The pain and swelling are more especially confined to the knees and ankles, though, in some instances, the symptoms are more diffused, the pain is more acute, and the general disturbance of the system more violent. It is usually not until gonorrhœa is on the decline that these symptoms supervene, though, occasionally, they have appeared to follow a sudden cessation of the discharge produced by the use of cubebs or copaiba. There is often much puffiness and tenderness of the ankles, especially towards evening. The skin is not externally red, and the pain is not much increased on pressure; the pulse is quickened, the stomach becomes disordered, and the appetite declines, or altogether fails. Occasionally it happens that all these symptoms are suddenly relieved by

an eruption of papulæ, in clusters, or, sometimes, of pustules, in very minute patches. When these appear, not only are the pains relieved, but the constitutional symptoms also yield; and the eruption, after some days, though sometimes not for many weeks, grows paler, and a desquamation succeeds, leaving a slightly discoloured state of the skin, which gradually subsides."

It is a fact worthy of considerable attention, that two of the most careful observers of disease, Mr. Hunter and Mr. Abernethy, but especially the former, who devoted much time to the study of the venereal disease, in all its forms, should have made little or no mention of gonorrhœal rheumatism. This fact appears in a still more striking point of view, when we consider that they scarcely ever, if ever, adopted the copaibal method of healing the disease; while Sir Astley Cooper, Dr. Titley, and others, stanch advocates of the copaiba system, have devoted considerable space to its nature and treatment.

The preceding extract from Dr. Titley's work, is an accurate description of what may fairly be called "copaibal fever," followed, as it so often is, by an eruption peculiar to that medicine, and by no means confined to its administration during a gonorrhœa. The circumstance of this form of rheumatism occurring during a gonorrhœa is, it is true, a coincidence, and may be nothing more; for, unless it be proved that it arises very frequently where no copaiba is administered (against the opposing evidence), it is fair to doubt its existence as gonorrhœal rheumatism.

Copaiba produces derangement of the intestinal canal, fever, and cutaneous eruptions. All this it does commonly, whereas gonorrhœa not once in a thousand cases produces either of those effects.

But even admitting that this form of rheumatism is a consequence of gonorrhœa, what explanation can be given of its production? Does it arise from sympathy? Or does it arise from specific venereal irritation, which its curability only by mercury would seem to imply? And if so, why is it not followed by secondary symptoms?

I assume the position, then, that the rheumatism occurring during a gonorrhœa, is, in very many instances, a production of the remedy, and not of the disease; that it is "copaibal," and not "gonorrhœal" rheumatism, upon the following grounds:—

1. Upon the preceding cases, and their daily occurrence.

2. Upon the fact that it arises during the administration of copaiba in other diseases.

3. That while it is proved that copaiba produces intestinal derangement, fever, and cutaneous eruption, commonly, such consequences of gonorrhœa, in the abstract, are extremely rare.

4. That if the copaiba be withdrawn, where the rheumatism appears, the latter affection generally subsides immediately.

5. That if the copaibal eruption follows an attack of rheumatism, the rheumatism almost immediately subsides.

6. Upon the absence of any notice of the matter by Hunter or Abernethy, who did not adopt the copaiba system.

7. Upon my own experience, that while this form of disease frequently arises during the treatment of gonorrhœa by copaiba, in cases treated upon the soothing system it is extremely rare.

FEEDING, IN A HORSE, AFTER

LOSS OF THE ENTIRE TONGUE.

Related by M. CAILLEUX, *in the Memoirs of the Veterinary Society of Calvados.*

A HORSE, belonging to the 4th regiment of Hussars, was very difficult to groom, so the soldier who had to manage him, fixed in his mouth a strong chain of iron, deeply serrated. Another man held the ends of the chain, and giving it a terrible jerk whenever the horse was rebellious, sawed off the tongue completely at its base, and it fell to the ground. Much hemorrhage did not follow. The portion of tongue detached was four inches and a half in length, and the disunion was effected at the frænum, or precisely at the point which separates the base of the tongue from the free portion of it. My first thought was to destroy the animal; but the interest which every one took in him, on account of his power, and his docility in every respect, except when he was groomed, and the desire to ascertain how he would feed himself when the useful part of the tongue was taken away, encouraged me to endeavour to save his life. Having stopped the bleeding, I kept his mouth constantly open with a gag, which I could extend or contract at pleasure; and I frequently injected cold barley-water, sugared and honied, and deprived the animal of every kind of food. On the third day I thought the wound sufficiently favourable to allow him a little barley-meal and water. He plunged his head into the liquid, half way up to the eyes, and then by means of the strongest inspirations, and sucking up a very little at a time, he contrived to empty the vessel. I then made him a kind of paste, of bran and barley-meal: he attacked it with avidity, seized a portion of it between his lips, and seemed astonished that he could do no more with it. I therefore renounced for a while this mode of feeding him, and contented myself with rendering his barley-water more nourishing, by increasing the quantity of the meal, and stirring the mass well while he was drink-

ing it. In this manner he was fed during three or four days; at the expiration of which period the wound was healed.

I now presented him afresh with the kind of mash which I had before made, and I remarked that he set himself to work more gently in order to eat it. He kept his head constantly in the manger, and, having gathered between his lips a small portion of the food, he pressed it against the bottom of the manger so as to force a part of it into his mouth. He then gathered another portion, and, subjecting that to the same kind of pressure, the first pellet was forced somewhat further backwards; and so he continued, until, bit by bit, it was pushed on to the back part of the mouth, and swallowed. This was the work of a long time, and proceeded very slowly, but by degrees he was able to dispose of the whole of his feed. During the time of his repast he was in a profuse perspiration, showing the difficulty which he found in satisfying his appetite.

This continued during three months, when it occurred to me to mingle a few grains of oats with his barley-meal and bran. At first the oats were swallowed without being masticated; but, by degrees, mastication returned. At length he began to eat with less difficulty, and the profuse sweat with which he used to be covered, disappeared.

This kind of food, convenient enough for a horse that does no work, did not accomplish our purpose: we wished to restore him again to the ranks, and to fit him for that, it was necessary that he should have more substantial food. I gave him some hay, at first in small quantities at a time. He took it in the same manner that he had been accustomed to manage his mash; he gathered it together with his lips, and formed it into a kind of pellet with his lips, and then pressing it against the bottom of his manger, he gradually forced it sufficiently far into his mouth to be enabled to seize it with his grinders, a new pellet constantly pushing on those that were before. It was fifteen or twenty days before he could manage this cleverly; and then, being kept apart from the other horses, he was able to manage the whole of his ration. Oats were, as before, mingled with his mash, and their quantity was gradually increased, while the hay was proportionably diminished, until he was fed at the same time, *and in the same manner*, as the other horses belonging to the regiment. As to chaff, he could not manage that, and it was not given. His former condition returned, he now does his duty as before, and is in perfect health. A similar case to this I do not recollect to have seen. I did not expect to succeed at all; but its fortunate result induces me to publish a case which, I think, will be interesting to my professional brethren.—*Veterin. Jan.*

JERVIS-STREET HOSPITAL, DUBLIN.

TREATMENT OF FRACTURES OF THE LEG AND THIGH BONES OF CHILDREN WITHOUT SPLINTS.

[The following remarks were made by Dr. Wallace, on going through the above hospital, on Thursday, January 7]:—

This case of fractured thigh, gentlemen (in a boy fourteen or fifteen years of age), is worth your attention. The fracture exists where the upper joins the middle third. I shall treat it without splints. It has been my practice to treat fractures in the legs and thighs of children for more than ten years without splints, and I have never had occasion to regret the plan. Deformity never, I may say, occurs, and even when it does, a very few weeks see it removed. When I commenced this plan, some of the routinists cried out, "Oh, what a shame to neglect the patient in such a manner!" They little knew the object in view. I do not believe, however, that I have ever before adopted the practice in so old a person as this. I am induced, on the present occasion, to give it a trial, not only from the results of my own practice in younger cases, but from finding in a paper by Mr. Radley, published in The Lancet a short time ago, that this practice has been by some persons lately applied to the fractures of adults. I confess that I should be tardy, in general at least, in going so far, because, if any deformity resulted, it would not be so likely to disappear afterwards. This is the source of my opinion as to the propriety of treating fractures in growing persons without splints, while I would not treat those of older subjects in the same manner. See! how this boy lies. It is the manner in which children, who have got fractured thighs, always lay themselves. You see he is on the left or fractured side, the leg bent a little on the thigh, and the thigh on the pelvis; and he lies with his abdomen half turned round to the surface of the bed, his sound lower limb being thrown to the right, and his elbow and fore-arm, of the right side, thrown on and supported by the bed. Now, he will lie in this position until he begins to feel strength in his limb, and then he will instinctively begin to move, and exercise it through the bed, in proportion to the strength which he acquires. I have very frequently noticed, in treating the fractures of very young children, that they allow the splints to remain on, and submit, if they do not hurt them, with great gentleness to their restraint, until the bone has acquired some strength, and then they begin to be weary of restraint, will not allow the bandages to remain quiet, will be found constantly to faddle with them, and will thus keep them loose. In fact, if you wanted to keep a child's

arm, which had been fractured, longer in splint than was necessary, you would scarcely succeed in doing so. The child, by its constant perseverance to remove restraint, would conquer. In treating fractures of the thighs in children without splints, I have never found that the attendant complained of any difficulty in the removal of the patient discharged.

CURE OF LUPIFORM SYPHILIS (A COMPLEX FORM OF THE VENEREAL DISEASE) WITH THE HYDRIODATE OF POTASH.

Here is another case deserving your attention. It is a case of the disease which I call "lupiform syphilis." This name expresses its origin from the venereal poison, and the resemblance which it has to lupus. Its remarkable characters are, its occurring in subjects who have not only had the venereal disease, but who have taken mercury in large quantities for it, and its commencing by tubercles, which pass into ulceration, and form groups of holes, which, sooner or later, heal, while others are formed in their neighbourhood, or on other parts of the body. Mercury will generally dry them up, but they soon break out again. For this form of disease there is no medicine which acts with the same certainty as the hydriodate of potash. You have at this moment in the hospital two other cases, those of *Free* and *Holland*, which demonstrate the great value of this medicine in this form of complicated syphilis. I will make these cases the subject of a clinical lecture. The man whom you see before you commenced the hydriodate of potash yesterday morning. Bring me the tests, and let us examine his urine. You see how it is already loaded with the medicine. He could have taken only half a drachm of the salt since yesterday. It is remarkable how soon the presence of this medicine can be detected in the urine, and how soon it escapes from the body when its use has been omitted.

CONTRACTION OF THE FINGERS AFTER DIFFUSE INFLAMMATION OF THE FORE-ARM.

Look at this case. It is a case of diffused inflammation of the fingers, hand, and part of the fore-arm. It has already formed matter and sloughs in the subcutaneous tissue. There were some incisions made in it yesterday, and you see with what great advantage; observe how much better it is to-day. I fear, however, that it will not end very satisfactorily. The patient is a very old man, and, besides, the sheath of the flexor muscles appears to be much engaged, and even, perhaps, the flexor muscles themselves are so; for, you may remark, all the fingers are bent towards the palm of the hand, and cannot be straightened. A permanent state of flexion of the fingers is not an unfrequent consequence of diffused inflammation of the front of the fore-arm. Whenever this is threatened, the greatest care should be taken to keep the fingers in a state of extension, not only until the parts are all healed, but for many weeks after. I have not unfrequently seen patients, who, from a neglect of doing this, have returned to the hospital with a contracted hand, many weeks after they had been discharged apparently well. You may remark how frequent diffuse inflammation is at present. This, you know, is one of its characters. Another of its characters consists in its either occurring in a limb without any evident cause, or from some very trifling cause. You see this illustrated in the present case. The patient says that it was caused by his burning, in a very slight manner, the end of his thumb, by touching some hot body,—a degree of injury which, probably, under other circumstances, would have produced no other effect than a state of painful feeling for a few minutes.

NEW METROPOLITAN UNIVERSITY.

A MEMORIAL, of which the following is a copy, has been presented to the Ministers by the teachers of the *Blenheim-Street School of Medicine*:—

"The teachers of the School of Medicine in Blenheim Street, founded by the late Joshua Brookes, F.R.S., have hitherto abstained from making any representations to his Majesty's ministers respecting the projected establishment of an university in London, because they believed that the new institution would be founded upon the broad basis of the public good, and therefore governed by the strictest rules of justice and impartiality.

"But in consequence of the uncertainty which prevails with regard to the intentions of the Government, and considering that this has given rise to rumours of an injurious tendency, and lest their silence be construed into indifference respecting the high interests involved in the question, they deem it to be their duty most respectfully but earnestly to request that all the schools of medicine at present recognised, and hereafter to be established, be placed upon a fair and equal footing under the new university.

"They submit that equal knowledge evinced by the pupils ought to be rewarded with equal honours, no matter where or by what means acquired, and that no advantages ought to accrue to any particular schools or classes of teachers, except the reputation derived from the manner in which the pupils acquit themselves at their examinations; unless the competency of the teachers is to be fairly tried in a public

concour, at which all their titles to distinction may be impartially investigated; and by either of these tests or modes of competition, the teachers of the Blenheim-street School are content to be judged.

"From the nature of the medical profession, the great difficulty of obtaining evidence that admits of a just decision as to the comparative ability and merits of those engaged in it, and the consequent difference of opinion necessarily entertained respecting their qualifications, perhaps the only mode of appointing the Examiners and Professors of the Faculty of Medicine at all satisfactory, and calculated to prevent all invidious feeling, is by concour, a mode adopted with so much benefit to the public in France, and to which the advancement of medical science in that country is mainly attributable.

"The advantages and details of this plan, the teachers of the Blenheim-street School of Medicine solicit the opportunity of laying before his Majesty's Ministers, in any way that may be deemed expedient. Confident that were it adopted in the new University, they would have to congratulate the Government on the formation of an Institution, which would prove a source of prosperity and happiness to the country—a real and lasting blessing to mankind."

LYNN SELF-SUPPORTING INSTITUTION

FOR THE SICK AND HURT.

To the Editor of THE LANCET.

SIR,—In consequence of the prompt and handsome manner in which you noticed a former communication on the subject of our Institution, I am requested by the Members of the Board of Management, to transmit the following statement of facts.

The Lynn Self-supporting Institution has now been established two years, and I am happy to add, has fully answered our most sanguine expectations. The industrious working classes are delighted with it; and although it does not, perhaps, sufficiently remunerate the practitioner, yet it pays him better than parish practice. It must also be remembered, that through this plan, many persons contribute *something*, who never paid *anything* before. But putting aside all consideration of advantage to the profession, and looking only to the effect upon those classes for whose benefit it was instituted, we have much reason to congratulate ourselves on the great improvement that this Institution is gradually working, both in the moral and physical conditions of the labouring classes.

Among the many advantages of this Institution, the following deserve to be mentioned. It enables the industrious man, by a very small weekly payment, not only to ensure prompt and efficient aid for himself and family, in case of sickness, or accident, but it gives him the privilege of choosing his own medical attendant! It has also the happy tendency of raising the working man from a state of dependence and degradation, to one of independence and self-respect, thus surpassing all Institutions purely eleemosynary, which, from the nature of their constitution, can never effect *this most desirable* result.

Should any of the numerous readers of THE LANCET be desirous of establishing a similar Institution, I can only say that a copy of our Rules and Regulations shall be at their service; and I confidently depend upon your powerful aid in disseminating any information which has a tendency to counteract the baneful effect of the old dispensary system, which I verily believe has been the means of degrading, and of ultimately sending to the workhouse, many individuals, who, without such temptation, would have remained industrious and useful members of society. I remain, Sir, your very obedient servant,

JOHN TWEEDALE, M.D.,
President of the Board of Management.

Lynn, Norfolk, Jan. 9, 1836.

P.S. Permit me to avail myself of this opportunity to express my admiration of the cordial and disinterested co-operation of those general practitioners of this town, who so willingly have lent their aid in this novel undertaking, which, in the outset, presented many difficulties without any certainty of adequate remuneration.

J. T.

*** Dr. Tweedale will confer a favour on the Editor by forwarding to THE LANCET OFFICE, at an early period, a copy of the rules and regulations to which Dr. T. has referred.—ED. L.

NONPAYMENT OF MEDICAL WITNESSES AT CORONERS' INQUESTS.

To the Editor of THE LANCET.

Reading, Jan. 9, 1836.

SIR,—A short time since I attended a coroner's inquest on a poor man, to whose assistance I had been summoned as the nearest practitioner. His friends being unable to defray the charge, I applied for payment to the Board of Guardians, a copy of which application, together with their reply, I subjoin.

Surely, Sir, this injustice to our profession cannot longer exist. I earnestly trust that Mr. Warburton will succeed in obtaining an Act of Parliament in the ensuing session,

securing to us a fair compensation for attendance in similar cases. Should you concur with me in the expediency of calling the attention of the profession to this subject without delay, an early insertion will oblige,
Your obedient servant,

GEORGE MAY.

"To the Board of Guardians of the Reading Union.

"Reading. Jan. 5, 1836.

"Gentlemen,—I take the liberty to remind you that some time since I made a demand of one guinea for attendance on the inquest of —— *Taylor*, and at a subsequent personal interview was favoured with your assurance, that the case should be reported to the Poor-law Commissioners, and that your decision would be guided by their opinion.

"I take leave to recall your attention to the subject, and should you determine to refuse my claim I hope I shall not be deemed presumptuous in requesting a statement of the Commissioners' opinion, as you will perceive that not merely this particular claim, but the interests of the medical profession in similar cases, are involved in their decision. I have the honour to be, Gentlemen, your obedient humble servant,

"GEORGE MAY."

"To George May, Esq.

"Reading Union, Jan. 7, 1836.

"Dear Sir,—I have to inform you that the Board of Guardians, in conformity with the promise they gave you, made application to the Poor-law Commissioners for instructions for their guidance in respect of the charges of medical men for attendance upon coroners' inquests, and I am directed by the Guardians to transcribe for your information the reply of the Poor-law Commissioners to that application:—

"'The Poor-law Commissioners for England and Wales have to acknowledge the receipt of your letter of the 19th inst. (December), and with reference to your inquiry upon whom it devolves to defray the demand of medical men for attendance upon coroners' inquests upon the bodies of paupers, the Commissioners desire to state that they are wholly unacquainted with any authority under which the payment of witnesses at coroners' inquests, or indeed of any other expenses attending inquests, can be charged upon the poor-rates.' I remain, dear Sir, your obedient humble servant,

"THOS. G. CURTIES,
"Clerk to the Board."

*** The members of the profession will do well to remember that their speedy personal applications to Members of both Houses of Parliament, will have a material effect, in the approaching session, on the decisions of the Legislature, with regard to the subjects discussed in the foregoing letters.—ED. L.

TUNBRIDGE-WELLS CONTRACT.

REPLY OF MR. WAY TO MR. SOPWITH.

To the Editor of THE LANCET.

SIR, will you oblige me with an opportunity of correcting a misstatement in last week's LANCET, in which I am personally concerned, under a promise that I will not again so trespass on your indulgence.

Mr. Sopwith in his communication to you has stated, that I called upon him (*being one of the Committee*) for the purpose of pressing him to attach his signature to the Resolutions of our Association, and on his refusal so to do that, I told him that the consequences would be, exclusion from medical societies, and objection on the part of medical men to render him assistance in cases of emergency.

I regret that Mr. Sopwith should have made these observations, as he was putting a false and unfair colouring upon the whole transaction.

It is *true* that I called upon him with the view of obtaining his signature, from a desire that, in a matter alike interesting to *all*, there should be unanimity in the expression of our sentiments. It is also true, that I did represent to him (but upon his repeated request *as a friend* so to do) the *possible* consequences of his refusal to act in concert with us. But, Sir, Mr. Sopwith has omitted to tell you that in this interview *I did most distinctly disclaim any authority as a member of the Committee*, to communicate with him, and gave him as my motive for so doing (and for its sincerity at the time I can most truly vouch) a desire that he should avoid the unpleasant position in which, as a young man, just entering on his professional career, he must be placed by such refusal. With my conduct *at the time*, he appeared satisfied, and *actually thanked me for the trouble I had taken*. This explanation was again rendered to Mr. Sopwith at a second meeting of our Association, upon his referring (*much to my surprise*) to the subject, before the whole of my professional brethren present, to all of whom it seemed satisfactory. As to a refusal to afford him assistance in cases of emergency, though Mr. Sopwith would imply *much more*, all that was intended to be conveyed by me was, that he could not expect, *in his absence from home*, that courtesy which is usually given and received by medical men.

Having entered into this explanation *solely* to remove the stigma which was so evidently intended by Mr. Sopwith to be cast upon my character, I will only beg to add, with respect to the other statements in that gentleman's letter, that considering myself merely as *the medium* through which the communications from our Association

were made to you, I do not feel called upon *individually* to reply to them, though I may, perhaps, be allowed to say that they are equally *misrepresented*, and, if worth the time and attention, equally capable of being satisfactorily explained. I am, Sir, your very obedient servant,

W. Way.

Tunbridge Wells, Jan. 11, 1836.

DUTIES OF MASTERS AND APPRENTICES.

To the Editor.—Sir,—The letter from a "Licentiate of the Apothecaries' Company," published in the number of your interesting and valuable journal for December 12, bears on a subject of no minor importance to the many individuals who make choice of the medical profession, and it struck me on its perusal as demanding reply. I do not for one moment desire to advocate the repetition of changes in the regulations of the Apothecaries' Company, or the unnecessary length of time originally required for the *actual servitude* of an apprentice. The tedious routine of studies to which students are subjected also, I consider to be exceedingly unwise and harassing, and highly discreditable to the Court of Examiners, a fact which is rendered remarkably evident after reading the letter of "A Medical Pupil" in The Lancet of December 12th. Nevertheless, whilst such a Company is upheld by Act of Parliament, it is necessary to comply with its regulations, though I trust that a day of change is not far distant. My intention now is to dissent from the opinion of your correspondent in imagining that a practitioner has any right to expect benefit from the *assistance* of an apprentice who has placed at the command of his instructor 200*l.*; and I contend that it would be contributing greatly to the good of all, if practitioners thought less of the *services* to be rendered by their apprentices, and attended more to furnishing them with the medical knowledge which young men are placed with them expressly to learn. The generality of apprentices are compelled to undergo, in the strictest sense of the term, actual servitude, during their whole apprenticeship, being constantly employed at the counter, dispensing medicines for patients, whose cases they never have an opportunity of investigating, and the effects of many of those medicines they never have time to study, although to learn them they have expressly paid their premiums; and I cannot reconcile to my mind the propriety of exacting from them that "assistance" which should be obtained through the medium of qualified assistants. Having thus expressed my thoughts on a very important subject, I remain, Sir, your obedient servant,

A General Practitioner.

December, 1835.

COMPULSORY APPRENTICE AND TICKET SYSTEM.

To the Editor.—Sir,—At a time so fraught with importance to the profession as the present, when a new, and, let us hope, an improved system, is to be introduced, it may be desirable to state even individual instances of grievances which have been inflicted under the old system. I mention one which is mine, and probably is that of many other students also. When I first entered the profession, being totally ignorant of its regulations, and thinking that a knowledge of medicine was the only real object to be sought, I was apprenticed to a practitioner residing a few miles from the metropolis, who, at the expiration of the first four years, I had the mortification to find, had not obtained the license of Apothecaries' Hall. I was then rearticled to a licentiate, but owing to this delay I had not commenced my hospital studies previous to the late regulations coming into effect, and (having but limited means) am materially checked in my advancement in the profession, the arrangements of the apprentice and certificate system have placed a veto of many years on my position as a candidate for professional honours and emoluments. I am, Sir, your obedient servant,

J. V. S.

Honesty to Purchasers of First Editions.—*To the Editor.*—Sir,—When first I saw Dr. Mackenzie's work on the diseases of the eye I was induced to purchase it, and I look upon it as an excellent and elaborate treatise; but I see a second edition announced, with plates, &c. Now, Sir, those plates must be a valuable acquisition to the new volume. I trust, therefore, that in common honesty to the purchasers of the first edition, the plates will be enabled to be procured by them, in the form of an appendix. Waiting to know whether we shall have to thank Dr. Mackenzie for this measure of liberality, so rare amongst authors—certainly never observed by book-*makers*—I am, Sir, your obedient servant,

A Poor Medical Bookworm.

Dorset, Dec. 1835.

Mr. Dewhurst.—*To the Editor of* The Lancet.—Sir,—I perceive another attack made upon me in your journal of this day, and shall feel obliged by your inserting this reply as early as convenient, particularly as it has been done by a malevolent individual to injure me. I never assumed the title of "Fellow of the Royal Society;" I know myself better than to assume honours never conferred on me. I never wrote a single article in the *Educational Magazine*, but in the *Education Journal* I added to my name

F.B.S.L., which was printed *F.R.S.*; this error was immediately corrected in the subsequent numbers by me; and I need not inform you that typographical errors frequently occur in the most eminent printing offices. I am not aware, Sir, that it is a crime to ask a noblemen or gentlemen to purchase my work, for the benefit of my infant family; although I am well acquainted with the individual who, under the assumed signature of M.R.C.S., has imposed upon you to insert the letter in question, as by an interview I could easily demonstrate. Had not misfortunes from a severe illness of two years from a dissection wound plunged me into difficulties, I should not have had to solicit subscribers. Had I been able to pay the fees, I long ago should most probably have been elected *F.R.S.*; and in consequence of my inability, Earl Stanhope three years ago generously presented me with a ticket, conferring on me all the privileges of a member of the Medico-Botanical Society; and similar honours have been conferred on me by many London, Dublin, and provincial learned societies. That I have founded a philosophical society I admit, and I can see no reason why my poverty should destroy my claims to the office of president, which I am proud to say I have held for two years with the approbation of the members (now about 320 in London and the country), and any time you choose to attend *yourself*, I shall be happy to transmit the necessary ticket of admission for that purpose. As to the latter part of the "M.R.C.S.'s" letter, I have already alluded to it in my letters inserted last summer in THE LANCET, so I shall not again refer to it. I remain, yours respectfully,

H. W. DEWHURST.

January 11, 1836.

WESTMINSTER MEDICAL SOCIETY.

Saturday, Jan. 9, 1836.

Mr. RICHARD QUAIN in the Chair.

DR. ADDISON, in the absence of more important medical news, related the case of a child, aged 11 years, in whose case he had committed an error of diagnosis (at Guy's?) The disease, as he had been informed by the surgeon who had sent the case, was one of amaurosis, dependent on a hydrocephalic affection. He was proceeding to prescribe accordingly, when one of his pupils put his ear to the chest, and detected mischief within. The chest was much contracted (the patient was "pigeon-breasted"), and the heart was heard beating violently. At the left side of the chest pneumonia was detected, accompanied by a mucous rattle, of a very peculiar kind, indicative of softening of tubercles, and he (Dr. A.) concluded, that the attack of pneumonia had accidentally supervened upon the tuberculated condition of the lung. The mucous rale was not heard at the apices, but as low down as the fifth or sixth rib, which added to the perplexity and interest of the case, and not feeling satisfied, he (Dr. A.) visited the boy at Hackney. By the treatment pursued, in spite, as he thought, of the disorganized condition of the lungs, the patient improved, but in an after examination he detected the source of fallacy. The boy was labouring under emphysema of the lungs, and when the pneumonia no longer existed the humidity disappeared, which had led him into error. He related the case, because we were bound in duty to narrate the truth in all instances This would have been a very admirable case to have fallen into the hands of an empiric, who, if it had got well, would not have failed to blazon it abroad as the cure of a confirmed case of phthisis, so pronounced by the faculty. The case also showed the necessity of being exceedingly cautious in forming a diagnosis in diseases of the chest. The treatment consisted of moderate depletion, a mild course of mercury, paying attention to the bowels, and employing blisters, which occupied about a month. For the affection of the head he had been cupped. Mercury was still employed mildly, and the sight was fast improving.

Dr. LEONARD STEWART believed that if permanent benefit were derived in the short space of a month, whatever treatment was employed, we were justified in considering it not to be a case of phthisis.

Dr. ADDISON said that had the sound existed at the apex, instead of at the base of the lung, he would have pronounced it, without hesitation, the result of disorganization. Dr. A. then briefly detailed two other cases, occupants of the same bed, one the subject of pneumonia, and the other presenting pneumonia coupled with severe bronchitis, which bore on the question that was argued here some evenings back, when he (Dr. A.) maintained that in genuine pneumonia, little or no cough, and no expectoration, except it were blood, was present, and if a slight glairy mucus were secreted, it was from the minute extremities of the bronchial tubes, and it was from these symptoms being considered essential to pneumonia, that the disease was frequently passed by unobserved.

Dr. CHOWNE said that so long as we had inflammation of the parenchyma of the lung, no expectoration was poured out, but when the disease extended to the bronchial tubes then there was expectoration. He (Dr. C.) did not consider this a new fact, but, on the contrary, a very ancient one.

Dr. ADDISON said that no correct information was to be found in any work on the subject, prior to the appearance of Laen-

nec's; and Cullen, though the best of all authors prior to Laennec, his writings presented a mass of confusion. But Laennec's enabled us to detect the diseases of the chest with as much certainty as common erysipelas, though we might meet occasionally with complications which were liable to puzzle us.

Mr. FERNANDEZ related a case wherein a physician, of no mean reputation, committed the following mistake. A stout man, of full habit, from early life had suffered from enlargement of the heart; for three months he was troubled with a constant cough, with slight expectoration. About a month back, as the respiration became very difficult and frequent, the physician was consulted and used the stethoscope, but he found some difficulty in explaining the nature of the malady. No respiration was to be heard over any point of the chest, nor any peculiar sound in the region of the heart; the expectoration was of a thick mucous character; the blood drawn was buffy. The diagnosis given by the physician was, that the patient suffered from acute bronchitis, and an effusion of fluid within the chest. Shortly after this examination a faintness came on, which was relieved by brandy, but at the expiration of a week a second returned and the man died. On inspection of the body after death, no fluid was found on either side of the chest, and the lungs looked perfectly natural, but on compressing them the contained air could not be forced out, the air-tubes being blocked up by the swelling of the lining membrane. The pericardium was highly florid and inflamed.

Some discussion ensued between Drs. Addison and Chowne, with regard to the writings of Cullen, the former deprecating them, from the confusion prevailing in the parts relating to the diseases of the chest; and the latter advocating them. The subject was then dropped to make room for that of magnetism, which occupied attention for an hour beyond the usual time of adjournment; but nothing was elicited worthy of being reported, and in order to produce from the diversity of opinions something more satisfactory, it was moved by Mr. CHINNOCK and carried, that Dr. Ritchie, who was present, be requested to enter fully upon the subject at the next meeting, when the meeting adjourned.

"The President of the Royal College of Physicians had an interview with the Chancellor of the Exchequer yesterday, in Downing Street. A deputation of short-stage-coach proprietors had an interview with the same right hon. gentleman immediately afterwards."—*Globe*, Jan. 12.

MEDICO-BOTANICAL SOCIETY.

OBSERVATIONS ON THE PERUVIAN BARK.

By GEORGE G. SIGMOND, *M.D.*

Read at the Meeting of the Medico-Botanical Society, Jan. 12, 1836.

It appears that at about the year 1639, the attention of the ecclesiastics in Spain was drawn to the bark of certain trees, which had about seven years before been imported into that country from Peru, their newly-acquired conquest in South America. It possessed a febrifuge power, which had been successfully exhibited upon a member of their own body residing at Alcala. It had likewise acquired some degree of reputation amongst their own countrymen in the new world. The Jesuits, a powerful, active, and highly-intelligent order, who aimed to be the depositaries of the knowledge of the age in which they flourished, exerted all their influence over the Christian world, to diffuse, under difficulties of no ordinary kind, this important drug. Many failures, however, from an ignorance of the proper mode in which it was to be employed, and from the importation of varieties possessing little or no power, awoke feelings of the strongest prejudice against it. Several years elapsed, during which a severe war of words was waged, before it was universally acknowledged to be what Dr. Robertson, the historian of South America, has justly described it, "the most salutary, simple, and perhaps the most restorative virtue, that Providence, in compassion to human infirmities, has made known unto man." A beautiful tract, in our own language, from the classic pen of Sir George Baker, gives us a most interesting history of the first introduction of the Peruvian or Jesuit's bark into civilized Europe, and more especially into this country, and the numberless works that have been published on that subject are founded upon this essay. But many other points of very great importance have been discussed, and still remain for elucidation; for, although many inquiries have been instituted, and individuals of high scientific attainments have been engaged in various researches, who have, with diligence and discrimination, employed themselves in eliciting facts, we have yet much to learn, and much that is unknown, to discover. Ten years since, Heinrich von Bergen published a work in German, "An Attempt towards a Monograph of the Barks," in which he gave a list of no less than 632 authors who had written upon the subject, and of 808 books and pamphlets that had been published, and this did not contain some of the

most distinguished authors of Spain—viz. Masdevalls, Franseri, Lopez, Banares, and since that time the discoveries which chemistry has made must have swollen the catalogue to an immense extent.

Of the subjects which have been treated, there are two questions which come more immediately within the scope of the inquiries of this institution, and which demand our attention. The first question to be discussed is, What are the trees which furnish the genuine cinchona, and how are they to be distinguished? The second is, In what way are the medicinal virtues which reside in these trees to be best obtained, for its administration in the great variety of diseases in which it has been successfully employed?

The first or botanical question, although it has been so much agitated, still remains in some degree of uncertainty; we appear now to be much nearer its solution than we yet have been. Amongst those from whose labours we have benefited, are some of the most distinguished men, De la Condamine, Joseph Jussieu, Mutis, De Candolle, Richard, Zea, Ruez, Lambert, Laubert, Humboldt, Bonpland, Viry, Fée, and "though last not least," Don. The second or the pharmaceutical question has also a long train of illustrious men to boast of. Pelletier, Caventon, Batka of Prague, Brera, Martius, Pfaff, Brandes, and I have on this occasion to point out the labours of our own chemist, Battley, which may be fairly considered as among the most important that have yet been undertaken.

It was in the year 1738 that the celebrated French mathematician De la Condamine, who was then resident in Peru, gave the first botanical description of the Peruvian Bark; but his wish to import it into Europe, either by seeds, or by cutting, was unsuccessful. The high estimation in which his efforts were held, is marked by the name which was by the universal consent of the botanists of Europe given to the tree which he described, and the Cinchona Condaminea was admitted in the Pharmacopœia. In Germany it was called "Der Offizinelle Fieberrindenbaum; in France, LeQuinquina; in Italy, China Chinachina; in Spain, Corteza de Loja; in Portugal, Quina; in Holland, Kinaboom; in England, the Peruvian Bark-tree; in Denmark, the Quinatræe; in Sweden, the Quinatred; and all the varieties of the bark found in commerce were implicitly believed to be the products of the tree thus described; different engravings of it have been given by Plenk, by Humboldt, and Bonpland; the one which is now before you, is from Nees Von Essenbach. Joseph Jussieu, who was in South America from the year 1739 until 1771, gave much attention to the barks, but seems not much to have increased our knowledge. In the year 1760, a year remarkable (as Doctor Manuel de Gregorio, the biographer of Mutis, observes) for the commencement of a botanic era, Mutis disembarked at Carthagena, and commenced, amidst the woods and wilds of South America, a series of inquiries upon the vegetable system of the new world, which has bestowed upon the race of man, innumerable sources of comfort, and prospects of future benefits.

Although Fenelle, Plumier, and Læfling, had made some slight botanical researches, they had done nothing for the science, which they only occasionally cultivated; it remained for Jose Celestino Mutis to unfold the beautiful volume of the works of nature which lay before him, to select the richest page for his examination, and to give to mankind the valuable result of his studies. He may be said to have laid the foundation for a superstructure which has now arisen, and which remains to be improved by an ardent host of labourers anxious to follow footsteps, so clearly, so usefully, so justly defined. He quickly transmitted to Europe whatever information he could glean, collections, drawings, specimens, were forwarded by him to Linnæus, and to all the scientific institutions of Europe; and the epithets which were bestowed upon him, and the testimonies of approbation and of admiration which followed him to the grave, are proofs that his talents were appreciated, and that his claims were universally recognised. He first described the four species of bark, and gave a classification in concordance with the views of botany then entertained, and the boundaries of that science are now much enlarged, and therefore more accurate knowledge of the objects of nature has been attained. Still his name is venerated as the first correct observer and the best describer of what he saw. His pupil Zea followed in the path in which his preceptor had gone, and has also a claim to our respect and gratitude, as have also Ruez and Pavon, whose rich and valuable collection of dried specimens of the genus cinchona is now in the possession of that ardent and zealous lover of science Mr. Lambert, one of the vice-presidents of the Linnæan Society; to this collection has also been added that of Dr. Thomson, which was obtained by the capture of a Spanish privateer, which was carrying home specimens collected near Loxa and Santa Fe. Mr. Lambert published "A Description of the Genus Cinchona," together with a plate, which was of important service, as well from the original matter it contained, as from its giving to us a translation of the papers of Humboldt. This interesting work,—accompanied by the collection which, through the liberality of Mr. Lambert, and his well-known love of science, is kindly open to the student of natural history,—may be said to have invited attention to a subject which had not in this country yet been at all handled. The travels

of Humboldt and Bonpland are next to be alluded to; their inquiries, and their descriptions of different species of this beautiful evergreen tree, have been taken by almost all botanists as the foundation of the different classifications which have been attempted since more regular and more natural arrangements have been followed, than the artificial ones which were so long admired.

The example of inquiry set by these botanists has been followed by other naturalists, but as the opportunities for conducting any inquiries are not very frequent, we must not expect that we are yet fully acquainted with the trees of the family cinchona, particularly as many trees possess in various degrees the power of depositing in their bark, secretions which possess the medicinal virtues which so remarkably reside in that which is called, as superior to all others, the bark. The modern genus cinchona is limited to about sixteen species; some which were formerly included are found very different in structure, and also in their properties. Amongst these are the different species of the exostema, the losmibuena, &c.; these various families belong to a very extensive natural order, the rubraceæ, which possess families of great diversity of form and structure, as well as others which do not offer such striking marks by which they may be distinguished one from the other. In the last volume of the *Linnæan Transactions*, is a paper, very short, but most valuable, which has thrown a new light upon the subject, and has furnished us with a key, whose application has unlocked an unexpected store, from which a guide through our difficulties is obtained. It is to Mr. Don we are indebted for a discovery of no small importance to us, and which adds a further claim to the consideration he already enjoys amongst naturalists. I am happy to learn that such a successor is appointed to our late lamented friend Gilbert Burnett, in the *King's College*; such a selection will be a source of gratification to every lover of that science which he has cultivated and adorned.

Mr. Don has taken the variations of the æstivation, or the manner in which the floral envelopes are arranged before they expand, as the character by which the different groups may be distinguished; and as these variations of æstivation are found connected with other differences in structure, it affords a very valuable distinction. He has observed, that in the true cinchonas, of which he gives 17 species, the æstivation is valvate.

Cinchona	Lanceolata	
	Condaminea	Dehiscentia Basilari Normal.
	Cordifolia	
	Rotundifolia	
	Ovalifolia	
	Purpurea	
	Pubescens	
	Micrantha	
	Humboldtiana	
	Glandulifera	
	Persuta	
	Stenocarpa	
	Caducifiora	
	Macrocarpa	Dehiscentia Terminali Sp. Aberrantes
	Oblongifolia	
	Magnifolia	
	Pavonii	
	Acutifolia	

In commerce four important varieties of bark are found, which are again subdivided, as I shall hereafter have occasion to show you. 1. The Quina Naranjada, or orange-yellow bark, of which there seem to be two sorts; the calasaya, and the royal yellow quinquina; the first title, however, appears to be given by the native Peruvians to the superior bark, which they believe the yellow to be. 2. The quina rosa, or red bark. 3. The quina amarilla, or pale yellow bark, of which there are different sorts, named from the appearance of the epidermis. 4. The quina blanca, or white bark. The opinion has been adopted by various medical authorities, and the Pharmacopœias have also sanctioned it, that these different sorts of bark are the products of trees easily to be distinguished one from the other, and the Royal College of Physicians, taking Zea as their guide, have admitted three species—the cordifoliæ cortex, the lancifoliæ cortex, the oblongifoliæ cortex. Whilst Dr. Thomson in the London Pharmacopœia, following the authority of Mutis and Zea, considers the cortex cordifolia to be the pale bark, in Edinburgh College, "Dr. Duncan, and Dr. Powel, regard this as the species yielding yellow bark." Whilst the lancifoliæ cortex is considered by the former authorities to be the yellow bark, those whose opinion I have just alluded to regard it as that which furnishes the pale. The cinchonæ oblongifolia cortex, and the magnifolia, seem to be acknowledged as those from which the red is obtained. Drawings from these trees are placed before you. A list of the best engravings you will find in the work of Nees Von Essenbach. These discrepancies of opinion were unavoidable, from the limited knowledge we possessed of the trees; but we have now ascertained that the shape of the leaves cannot serve as guides to the peeler, and his practical experience must remain as his only assistant, until science has made some farther advance; at present he depends upon his eye, and upon the taste of the bark. Humboldt's opinion must be allowed to be quite decisive. He says, "I hardly know any one tree varying more in the shape of its leaves than cinchona. Whoever determines single specimens of

dried collections, and has no opportunity to examine or observe them, in their native forests, will be led to discover different species, by leaves which are of one and the same branch. The yellow bark we have found at one and at the same time with foliis ovato-oblongis, ovato-lanceolatis, and ovato-cordatis; Mutis calls it cordifolia, because it is the only kind on which cordate leaves are sometimes found. Even the laurel-leaved cinchona condaminea, the finest bark, from Uritusinga, has very diversified leaves, according to the altitude at which it grows, and which equals that of St. Gothard or Mount Ætna." Humboldt very properly points out the form of the flower as the diagnostic mark, but this of course is only useful at one particular season. Humboldt also took with printer's ink, impressions of the leaves, at Gonzanoma near Loxa, which still further corroborated his opinion that the distinction made from the shape of the leaves is unsafe.

I do not think that enough of facts have yet been accumulated, to enable us to judge of the value of the lichens, as a diagnostic mark of the species, but certainly their presence or absence may be considered as most useful indicators of the state of the bark. We know that the several species of the family rhizomorpha, are very active agents in decorticating dead trees; and, as has been observed, "they assist in the disintegration of lifeless organic bodies, which would, otherwise encumber the surface of the earth, and be exceeding tedious in their removal."

Thus the rhizomorpha cinchonarum is a rare species, but whenever it exists upon the epidermis, it indicates that the bark is in a state of decay, and that it has lost its febrifuge power. Fée states, that the presence of himantia cinchonarum is a certain proof that putrefaction has very far advanced. The hypochnis rubro-cinctus and nigro-cinctus rarely grow in great quantities on healthy trees; and the opegrapha rizicola, and fissurina, likewise may be considered as indicators of the advanced age and impoverished state of the tree on which they are found.

When I have, at our next meeting, an opportunity of resuming this subject, I shall take up the pharmaceutical inquiries, more particularly those to which I have referred as entered upon by Mr. Battley, as he has, with great labour, gone through a series of most interesting experiments in his laboratory, which I shall have the honour of detailing to you.

That we cannot, then, look to the variation of the shape of the leaf, which must be affected by altitude, by age, by climate, by the situation of the tree, whether surrounded by others or standing alone, by many circumstances attending its development, I think must be admitted. Another source of information has been sought, and some expectations raised, which I think cannot be borne out, namely, that by the lichens, or mosses, we can distinguish the tree. They have been studied with a praiseworthy ardour by botanists. Fée, more particularly, has devoted great attention to this subject; in his memoir on the cryptogamic epiphytes of the officinal bark, he has made some singular observations. He states that the gassicurtia is found, exclusively, on the yellow bark; that the graphis interrupta is found only on the bark of the lancifolia; these are the lichens which you find upon the specimens before you; and, after very careful examination of a vast variety of the different specimens of barks imported into this country, they are the only ones which I have been enabled clearly to distinguish. The ascidium cinchonarum, which is said to be found indiscriminately on them all, I have never observed, at least, taking the engraving given by our late professor, Gilbert Burnett, as my guide. Upon the red bark I have never observed the slightest appearance of adhering lichen; but this study is pursued under great disadvantages, from the want of a sufficient number of engravings to consult.

THE LANCET.

London, Saturday, January 16, 1836.

The rejection, on Thursday sennight, at Apothecaries' Hall, of a student, who was a member of the Medical School in Aldersgate-street, has created a very strong sensation in several of the "recognised" establishments; because it was well known, not only to the lecturer, but also to the Aldersgate-street class generally, that he was fully capable of executing the duties of a medical practitioner in every department of his profession. The conduct of the examiner on the occasion in question was, we understand, that of a vulgar, rude, cruel, and unfeeling man, and the extent of his ignorance was fully proved by the errors he committed in his insolent attempts to correct the individual who was subjected to his coarse and heartless scrutiny. So long as the examinations at our medical establishments are conducted in private, for pre-

cisely the same length of time will they continue to be made the instruments of oppression and injustice. The rejected candidate had been the apprentice of a gentleman who was not "in favour" at the Hall, and the cowardly expedient was resorted to of making an unoffending person suffer for the supposed misdeeds of another. On very many occasions similar brutality of conduct has been shown towards the students at the College of Surgeons; and the public may be assured, that whenever so much grossness of behaviour is manifested by men who are called upon to execute public duties, there must exist in those men a marked deficiency of the very qualifications which would best fit them for executing the duties of their office. The ignorant examiner, in fact, often subdues his victim by his insolence and his menacing bearing. Not five questions are asked before the student feels that he is to be disgraced. This distressing apprehension disturbs the operations of his memory, distracts his mind, and altogether renders the judgment incompetent for the performance of the task which he is required to undergo, and the unfeeling wretches who thus trifle with the feelings of the candidate, behold in the mischief they create the chief source of their own enjoyment, as they refer to the incompetency of the student, as furnishing the best proof of their own tact, skill, and dexterity, in conducting the examination. Most sincerely do we hope that another session of Parliament will not be allowed to transpire without bringing into existence a statute which shall have for its object the institution of a FACULTY OF MEDICINE in this metropolis, wherein all the examinations shall be conducted in public, upon the system of concours, or professional competition. The tyranny of "Rhubarb Hall" rapidly approaches the hour of its termination.

Since the foregoing remarks were written we have received a copy of the following manly challenge from the gentleman whom this foul attempt has been made to injure. The HAGS of the HALL will, on reading it, be ready, we suspect, to plunge headlong into one of their own caldrons. The original of this letter has, we are informed, been transmitted to the examiners at the Hall.

"*To the* COURT OF EXAMINERS *of Apothecaries' Hall, London.*

"GENTLEMEN,—Having applied to you last night for the license of your Company, and having been examined by one of the members of the Court, and "rejected," I must attribute such "rejection" to the operation of some private feeling, which I have good grounds for supposing existed in the mind of my examiner. In order, therefore, to prove to THE PROFESSION, generally, and to THE PUBLIC, that such "rejection" was not the result of *incompetency* on my part, I *demand* from you a PUBLIC EXAMINATION, to be conducted in the presence of a professional audience, and I now state to you that I am ready to undergo such an ordeal on any day, and at any hour which you may be pleased to appoint.

"I am, gentlemen, your obedient servant,

"THOMAS SMITH.

"1, Jewin-crescent,

"Friday morning, 8th Jan. 1836."

MANY erroneous opinions are entertained relative to the power which can be conferred by the Crown on the governing body in granting a charter for the establishment of an University in this metropolis. Most of those opinions are equally absurd and unfounded, but there is one which operates at this moment to the disadvantage of professional and public interests. It is believed, we understand, that the new charter can bestow on the examiners of the University an authority, in awarding diplomas and licenses, equal to that which has been bestowed on the Court of Examiners of the Apothecaries' Company by the statute of 1815. In other words, it is believed that the University Charter

can empower the Senate to grant diplomas and licenses which shall confer upon their possessors the privilege of engaging in medical practice in England and Wales. Hence a correspondent who signs his note "OBSERVER," "cannot conceive how the "Editor of THE LANCET should be of opi- "nion that, even supposing the University "should be devoid of any great reputation, "it should still offer no inducements to "candidates to apply for the diplomas, when "the possession of those diplomas will em- "power the graduates to practise in all "branches of the profession, and would "thus enable them to escape from the ex- "tortions practised in Lincoln's-Inn- "Fields, and the degradation of resorting "to the drug Hall in the City."

With regard to the College of Surgeons, it matters not what may be the arrangements in the new University. While we are without a FACULTY OF MEDICINE, and while the public in the distant parts of the kingdom are deceived by the name of "the College," there will be adventurers who will continue to give twenty-two pounds for a really worthless document, although it is well known to every professional man, that any individual may engage in the practice of surgery, without making any such purchase. Young men think it a fine thing to be enabled to show that they are Members of "the Royal College of Surgeons in London;" and as the generality of the community are ignorant of the character of the examination at that institution, the title often carries with it some importance in the minds of the uninformed public. If, therefore, the University be not founded on a principle of just and enlightened liberality, —if the examiners be not men of very distinguished and exalted attainments, and if they do not prove their qualifications by the mode in which they obtain their offices, the public will consider the title of "M.R.C.S.L." to be equally as valuable as that of "M.D.U.L." In short, it will be thought precisely as well of a man if he be a member of a "Royal College of Surgeons," as if he be a graduate of a second or third-rate University. The new institution, therefore, cannot, in any manner, affect the legal privileges which the College of Surgeons can confer on its members, because, in point of fact, the College has none to confer. It can neither give to a man the right to practise surgery, nor take from any individual that right. It is, therefore, strictly speaking, an incorporated nonentity. The minds of the students, therefore, will not, in all probability, be influenced in the remotest degree, either in avoiding the College of Surgeons, or in applying to that institution for its diploma, by the institution of the new University.

In the case of the Apothecaries' Company, however, the bearings of this question are wholly different. In the instance of that establishment, if it be the object of the candidate to embark in the profession as a surgeon in general practice, he *must* obtain the license of the Apothecaries' Company, even if he should be a medical graduate of the Metropolitan University. It is on this account that our correspondent "OBSERVER," and many others, are deceived. The source of the error into which they have fallen may be found in the opinion they hold, that the powers which may be conferred by the new charter, can interfere with, or totally abrogate, the authorities which are now exercised by the Court of Examiners of the Apothecaries' Company. In order to dispel this erroneous view, it should be recollected that no charter can destroy, or even weaken, the powers which are exercised under an Act of Parliament. Unless, therefore, the Apothecaries Act of 1815 be repealed, the new charter could not operate to the prejudice of the drug-dealers in Blackfriars, and if this Act were abrogated, it is to be hoped that there could then be no interest connected with medical practice left to be prejudiced. But a charter, it should be distinctly understood, cannot annul the conditions of an Act of Parliament. In fact,

the principles and details of every charter, must be in accordance with the statute and common law of the land. If it be constructed otherwise, that is, if it be framed in opposition to the law, it becomes at once *an illegal instrument*, and, accordingly, entirely *inoperative*.

It is impossible therefore to commit a greater blunder than to believe that the new charter can break down the monopoly, or soften the tyranny, of the Apothecaries' Company, or in any respect control the proceedings of the London College of Physicians, because the functions which are exercised by the drug corporation were created by Act of Parliament, and the privileges of the College of Physicians arising out of the charter granted by HENRY the EIGHTH, have been confirmed by Acts of Parliament. The new charter will necessarily be directly powerless with reference to both of these corporations, and, as we before stated, if it is to become, in law, a valid instrument, it must be so shaped as to operate in conformity with the existing statutes and prescriptive customs of the realm. In granting a charter, observe, it is presumed, both by the spirit and the letter of our constitution, that a sacrifice is made of a portion of the royal prerogative, in order to advance the public interests. The power, therefore, of granting a charter, is, in itself, a lawful condition, or prerogative, sanctioned by our free constitution. Accordingly, that power, it is easy to conceive, must, in all cases, be exercised in accordance with the authority of existing statutes; for if it could be adversely used, with reference to the law itself, the royal hand might, for very unworthy purposes, push aside by degrees all our ponderous volumes of statutes, and the will of the KING would in such case establish a tyrannical supremacy over the legislatorial rights of both houses of the senate.

Seeing, therefore, that the new charter, in order to become law, must be moulded into a form which is suited to the spirit of the law, and analogous to the circumstances which the law itself has created, we are anxious to learn,—as the new instrument cannot subvert existing rights,—how far any *new* rights and privileges are to be established by it, in accordance with, or adverse to, the rapidly advancing knowledge of the times in which we live. We have called, repeatedly, for THE EXPOSURE OF A DRAUGHT OF THE INTENDED INSTRUMENT, and we must confess that we have formed a wrong estimate of the minds of his Majesty's present Ministers, if they cause this document to be projected and executed in secret. If the thing is to become law, the public ought to be made aware what are proposed to be made its conditions, but if it be not to possess the weight of a legal instrument, but is created for the sole purpose of calling into birth a series of empty and worthless titles, it must be regarded as an act of solemn mockery, which deserves exposure and general condemnation.

It has been remarked that there is no precedent for the publication of the intended charter,—say, in the Government Gazette. The proof of this omission of publication is not, alas! wanting *in words*. The *effects* have long been sufficiently perceptible in the proceedings of the College of Surgeons, the College of Physicians, and other chartered bodies. If there be no *precedent*, so much the worse for the public; for so many the more injurious charters have crept into existence, and, as the only effectual corrective of the evil, let the precedent be immediately established. The circumstances which transpired in the years 1799 and 1800, are admirably illustrative of the advantage of publicity, and the evils of secrecy, in matters connected with legislation. The managers of the old Surgeons' Hall applied to Parliament for an Act of re-incorporation. Their bill was introduced, and, on its infamous provisions being made known, the profession denounced it as with one voice. A stormy discussion afterwards arose in the House of Lords relative to its proposed enactments. An admirable speech was made

upon it by Lord THURLOW. The principles of the measure were denounced as being narrow-minded and iniquitous in the extreme, and the advocates of the scheme were abashed and dismayed, and shrunk from the dirty labour which they had been called upon to execute. The bill, therefore, was kicked out of Parliament; but it met with that fate because, and only because, its odious provisions had been subjected to the scrutinizing examination of the members of the profession.

Now mark. In the following year, to what manœuvre did the old corporators resort? Why they went *slyly* and *secretly* to *the King*, and petitioned His Majesty for a charter of incorporation. The scheme was successful. The royal ear was abused, the members of the Privy Council were either knavish, asleep, or deluded, and the instrument was fabricated. The results have been known and felt by the surgical profession in England, during the last six-and-thirty years. The charter thus cunningly obtained, was fabricated out of *the identical clauses which were contained in the Bill that had been so scornfully, so indignantly rejected by the House of Lords in the preceding year!*

This is a most instructive historical lesson. Are we to be insensible to the admonitory indications of experience, and remain unmoved by the evidence of facts, the force of which any child may feel and understand? We most emphatically exhort the present liberal Ministers of the Crown, not to tarnish their reputation, or derogate from the character which they have established for open and straight-forward dealing with the public, by obtaining for the intended charter the sign-manual of the KING, until the country is placed in full possession of a knowledge of its intended clauses. Assuredly it must be confessed that *a system of courtly intrigue and secrecy*, in framing laws which are designed to affect the most important interests of *the community*, is utterly incompatible with the spirit and operations of a representative government. In the last session of Parliament the charters of our municipal corporations were all demolished, as the enormities to which they had given birth could no longer be endured. Those instruments of oppression had all been obtained in secret, but the acts of injustice which have been perpetrated under them, operated on the *public*. Could those charters have been obtained, except by some secret, some covert method? If the application for each municipal charter had been made a subject of discussion in Parliament, it is utterly impossible that the principle of self-election could have sustained its ascendancy during so many lustres as it has done centuries. *Secrecy* was the source of evil on every occasion when a municipal charter was granted, and in founding an university in the metropolis of this empire, no man in his senses can believe that a liberal Ministry will plunge headlong into such a poisoned source of irremediable of mischief.

NEW METROPOLITAN UNIVERSITY.

(From an Edinburgh Correspondent.)

THERE has not been a topic of more general conversation for a length of time amongst us here than the Metropolitan University, all classes of society being interested in the well-being of our own college; for the average number of students usually amounts annually to as many as two thousand, producing, as you may suppose, a very considerable revenue, not only to the cormorants of the University, but also to the tradespeople of the town. Though some of the other lecturers in the University may suffer more or less, yet it is the members of the medical *senatus* who are most alarmed on the present occasion, and certainly not without good cause. They have enjoyed, it may be truly said, a complete monopoly in the manufacture and sale of degrees for at least a century past; and one year after another have the medical professors used all their ingenuity to increase the price of degrees, until, like all Jews in trade, it has been mounted up so high that others have been induced to bring the same commodity to market at a lower rate of charge. It is not much more than twenty years ago that they added twenty-five per cent. to the price of each ticket, but Dr. JOHN THOMPSON'S

liberal additions to the curriculum gave them a death-blow, which they are all aware they never have recovered, nor ever can. It is only to be wondered at that their monopoly has lasted so long, and that the largest and greatest metropolis in Europe has not until now competed with them, and had a University within its own precincts, without compelling its inhabitants, as well as those of all England, to repair to Scotland, not in search of knowledge, but in order to be *dubbed*. I consider this fact, indeed, to be a monstrous anomaly in the history of civilized nations. Notwithstanding the absurdity of the attempt, our Edinburgh medical professors are determined to make a struggle to arrest the progress of reform in medical education. Meeting after meeting has taken place among them, and if I mistake not you will soon see one of our anti-liberals amongst you, to sow the seeds of discontent, and nurse the tree of corruption. Young THOMSON is too well known from *his past* services, so that a *new* man will be sent to London.

Sir CHARLES BELL is not yet come, and Dr. JOHN THOMPSON, who knows him of old, quaintly observed the other day, "That "if the surgical knight does not come down "immediately, he never will come at all." My own opinion is that he may yet give us the go-by, for it is not common, nay I doubt if it ever occurred, that a Scotch doctor who had once crossed the Tweed ever returned to his native mountains. Parritch and kail are poor fare after roast beef and plum-pudding. However, times are changed, and Sir CHARLES's discomfiture at the *London University College*, the total failure of the *Middlesex school*, and the approaching revolution in Lincoln's-Inn-fields, may induce the chivalrous knight again to try his fortune here.

As it is most likely that you have not already seen it, the inclosed copy of his letter, *accepting* the chair, will amuse you. It is an excellent portraiture of the man, whose vanity is so prodigious, that he never loses an opportunity of talking about "I, myself; I!"*

* "Brook-street, 11th Dec.

"MY LORD,—I have had the gratification of receiving your lordship's letter, and I accept the honour which you, the magistrates, and council, have conferred upon me. The manner in which this appointment has been conferred, and the assurances with which your lordship has accompanied the communication, lead me to anticipate the utmost harmony in our endeavour to cultivate medical science, and promote the reputation of the University. You place me where there is every motive for personal exertion; but where, most of all, experience and judgment are necessary. As to the first, I trust my habits of life give you sufficient warrant. For the rest, I ground my hope of being useful, on the characters of those distinguished men, many of them removed from the stage, with whom I have been united, or with whom I have been in consultation on many trying occasions. By this intercourse my opinions have been matured, and now, through your kindness, I shall use the advantages which time and circumstances have given me, so as to preserve the record of the opinions and practices of the men who have raised the profession of surgery in these kingdoms to its present acknowledged perfection. By this, to me, eventful change, I am led to reflect on the advantages I have possessed, in my anxiety that your lordship and the council shall not have occasion to regret the decision to which you have come. The unanimity of the council, and the very flattering expressions of your lordship, lessen the regret which every one must acknowledge to be natural to me in leaving a society where I have experienced uniform kindness and liberality, and in breaking the intimate and friendly relations with some of the most estimable men of our day.—I have the honour to be, my Lord, with great respect, your lordship's obliged and very humble servant,

"CHARLES BELL.

"To the Lord Provost, &c."

The anatomical teachers, as well as the students, have become exceedingly impatient, because the "inquiry" which was instituted to inquire into the conduct of Dr. CRAIGIE, our anatomical inspector, has not yet been brought to a conclusion. This circumstance has heaped such odium on the public functionaries, whose duty it was to have prosecuted the investigation without delay, that a public meeting of the students is contemplated, as the coarse and insolent doings of the awl-wise "man of leather," as CRAIGIE is called, has caused an universal feeling of disgust in the schools, and has materially interrupted the teaching of practical anatomy here.

Another topic has formed the subject of a good deal of conversation here, though it may be of too trifling a character to interest you. Dr. ABERCROMBIE has received a medical degree from Oxford! This appears to us to be strange, as we have always flattered ourselves that one from *our own University* was *the best of any*, whilst we have always ridiculed degrees from an University where medicine is *not taught*. Although to us the matter is inexplicable, *you* perhaps may see further through it. All we know is, that Abercrombie, though a very pious man, is a cunning, intriguing little fellow, and when he went up to London to be examined before the Parliamentary Committee, he made himself Sir HENRY HALFORD's most obedient humble servant, and toadied him in all ways, which makes us

believe that your wily President must have been the means of sending him the Oxford degree, in payment for the humility and meekness shown by him, and for certain "services" hitherto unknown.

ST. GEORGE'S HOSPITAL.

ELECTION OF A CHAPLAIN.

A VACANCY having occurred in the office of chaplain to St. George's Hospital, in consequence of the resignation of Mr. Walker, the candidates for the appointment were, the Rev. FRANCIS GREGORY LE MANN, and the Rev. Mr. NEVIN. The election, which was actively contested, terminated on the 8th instant in favour of the latter candidate—the numbers at the close of the poll being as follows—

For the Rev. Mr. NEVIN 156
For the Rev. Mr. LE MANN .. 81

Without attempting to institute any inquiry into the merits and qualifications of the candidates, it may be remarked, *en passant*, that the regret felt within the hospital, amongst those who are most properly interested in the result of the election —the sick inmates—may be expected to be very great, at the non-election of Mr. LE MANN, who by his kindness and attention to the sick, during the seven or eight weeks when he officiated in the hospital for the Rev. Mr. WALKER, previous to his resignation, succeeded in obtaining the approbation and good will of every inmate of the institution. Mr. LE MANN is well known, by those who have the gratification of his acquaintance, to be possessed of liberal and enlightened sentiments, and an excellent knowledge of classical literature, having, at a very early period of his career, obtained a fellowship in King's College, Cambridge. Testimonials of a very flattering kind relative to the faithful and zealous discharge of his ministerial duties were produced in favour of Mr. LE MANN, from clergymen of high character, by whom he had been employed as a curate; and had not the election been interfered with by the medical and surgical staff of the hospital (with the exception of Dr. WILSON and Mr. WALKER), there is every reason to suppose that Mr. LE MANN would have been elected by a triumphant majority of the independent governors, many of whom are much disgusted with the indecent interference of the medical oligarcy, who for years past have trafficked in all the hospital appointments. It was frequently remarked, in the course of the canvass, by the independent governors, that the officious conduct of the Brodean party in all matters relative to the hospital had prevented them from attending the board-room, as well as from voting at elections, and that they were fully determined to abate the nuisance by withdrawing their support and influence as soon as the term of their annual subscriptions should have expired. We were informed, and believe it to be correct, that Mr. NEVIN has not had the benefit of a collegiate education. The conduct of one of the medical officers, whose name is unworthy of mention, has met with the severest reprobation. At the commencement of the canvass, he announced that he was favourable to the election of Mr. LE MANN, and actually tendered to one of his friends, instructions relative to the most appropriate course to be pursued in order to obtain the chaplainship, although at the very time, the hypocrite was actively canvassing for the other candidate. Personal exposure and rebuke, however, have followed this deception, which the party is not likely to forget during the remaining days of his earthly pilgrimage.

The British and Foreign Medical Review. Edited by JOHN FORBES, M.D., F.R.S., and JOHN CONOLLY, M.D. No. 1. London. Jan. 1836. Sherwood.

A NEW candidate for the favours of the medical profession has wedged itself in amongst the periodicals, between the *Medico-Chirurgical Review*, and the *Edinburgh Medical Journal*. Which of the three at last will go to the wall we pretty well know, but object to alarm either party by publicly stating. We are well enough pleased to see the work, as strenuous friends of competition in all the departments of medical science. Who, indeed, have more reason to be pleased with rivalry amongst periodicals? We have witnessed the life and death of twenty claimants of that class since the year of our Lord 1823, each new "journal," *mock Lancets* and all, by thrusting itself beneath the pedestal of THE LANCET, serving as an additional lever of elevation to this work.

The Editors of the *British and Foreign Medical Review* came forward professedly and chiefly, we believe, with these two excuses for their project; first, that foreign medical literature had not obtained the attention which it deserved from the existing medical periodicals of these countries; and, secondly, that the criticisms and analyses of English works, which appeared in our quarterly medical journals, were not "free and candid" productions, not furnished by "wri-

"ters possessing a competent knowledge of "the previous literature of each article, or "as the work reviewed might demand,"—were not "the productions of men of expe-"rience and efficient acquirements, inde-"pendent of the influences too evident in "the hasty productions of juvenile and in-"considerate writers,"—that the task had been "hitherto confided to persons little "qualified to undertake it," to "inexperi-"enced reviewers, however able (!)," "to "misrepresenters and critics of limited "knowledge," "uncandid persons," and youths of "unexercised judgment."

This was a tolerably smart slap in the face for Messrs. JOHNSON, (senior and junior, according to the title of the *Medico-Chirurgical,*) with how much justice or decency inflicted, we profess not to say. Such, at least, they felt it to be, whereupon an attempt was made to laugh down the new editors, as they were seen rising through the trap-door, with the announcement in their mouths that they appeared as "writers of known and unquestionable respectability." We are obliged to presume that this character was assumed by the Editors in their own persons, because those gentlemen are the only "writers" who are stated, and are, therefore, acknowledged and known, to be contributors to the first number of the new journal. Or was this an oversight, and contrary to a possible expectation, after such a declaration, that the name of each critic or analyst would be attached to his respective article?

In considering the question of "success" in the establishment of a new periodical, the point of debate with the projectors is—or ought to be—generally, that of the *means* of the class of persons to whose interests it is to be devoted, or whose attention it is designed to arouse. To talk of there being "room" or "no room" for a new work is absurd. There is always abundance of room where the arena of literature is not crowded with obstacles to publication erected by the law,—where there is perfect liberty of the press. But, though there be whole acres of "room" for the erection of marts, there may be more merchandise than buyers; the buyers may be few, or not in want, or already supplied, or lacking in riches, and we certainly suspect that one or other of these conditions will prevent the career of *three* quarterly medical journals in this country from being very protracted. Why, Mr. Souter's quarterly journal is but just dead! The Edinburgh has long ceased to circulate any where but amongst a *very* select few at home, and some hundred or two surgeons on naval stations abroad; Dr. JOHNSON once had such a struggle for it, that nothing but the excitement of change, backwards and forwards, from quarterly to monthly, and monthly to weekly, and weekly to quarterly issues of his work, kept it in life and being; and last, though not least, one of the editors of the new journal has already experienced a signal failure as editor of a medical periodical. As, however, there may be purchasers enough to sustain one quarterly journal, it must be a strife of industry, we suppose, amongst the Editors, whose shall be the better production, the last speculation, however, always working under the disadvantage of infancy. Of "industry," we say, because the labourers in the field of literature are open to the engagement of all, and that *redacteur* would be unwise, indeed, who would work with the aid of inferior talent, when better was to be obtained.

By-the-bye, there is one division of the field in which no quarterly journal has yet gained a character, or even sought it,—that of medical politics,—taking arms in favour of free and liberal medical institutions. Not that any one of them has eschewed the question; but each has either at once declared an open enmity to thorough medical reform, or has sneered at its noble and generous views, or has with one hand tried to retard its progress, while aiding it with the other. Thus have we seen the most diverse and opposite views in one number of the quarterlies, on the subject of medical government,—good principles, and wretched and impossible details; or correct details with expressions of horror at sound principles. There never seems, indeed, placed over them that watchful eye, and that revising hand, which are essential to ensure high and sterling character,—and inspire confidence in the sentiments and opinions expressed in the name of "We," and the reader never appears to detect the real views of the presiding genius, excepting when the declarations are *adverse* to the cause of medical reform.

It would puzzle us, for instance—perhaps

not worthily—to divine the principles that could be defended on the views which prevail in the new journal. Thus, at page 2 we find a most unhappy sigh over "medical instruction," doubtless in consequence of some obscure impression on the part of the writer, that "Government" is about to adopt a change in medical law which will tend to "increase the amount of learning and scientific acquirements" in the medical profession of England,—that is to say, literally, to upset the ticket and certificate system in medical education. Yet at page 36 is to be found the following unconsciously uttered anathema against that very system; which for us to explain and apply is superfluous:

"The number of young men sent to their studies in London, is, we apprehend, considerable; and we can never look upon the youthful, ardent, and hopeful countenances of the junior students at the commencement of each session, without our thoughts being carried to their several homes, where efforts are making, and *sacrifices*, of which young students are not always mindful, and which give something of solemnity to the tacit engagements so *boldly* entered upon by their public teachers, in years which are to determine whether or not those sacrifices are to be made, and not a few parental anxieties to be endured in vain."

"Sacrifices," indeed! Sacrifices to the god MAMMON, in the temples of the "recognised" hospitals and schools, the Colleges and Halls, where, for simple bits of worthless paper, thousands upon thousands of pounds are annually extorted from the "anxious parents" of the certificate-lacking students. The abolition of this system, on the one hand, and its sacred preservation on the other, are the ultimate points for which medical reformers and the monopolists severally struggle.

Of the execution of the new Review, we are yet hardly prepared fully to speak. The first article, however, is injudicious enough to surprise us. Is it for the production of this kind of analytic and critical articles on foreign works,—articles not of the slightest value at home—that the projectors considered a new medical journal necessary in London?

On the whole, there seems to have been no want of industry in the conductors of the first number.

Case of Loss of the Uterus and its Appendages, soon after Delivery, with Remarks on the propriety of removing that Organ, in Cases of Inversion or Scirrhus. By JOHN CHARLES COOKE, M.R.C.S.E., &c. E. Cox, Southwark, 1836. pp. 22.

FROM a little pamphlet which has just been transmitted to us under the above title, we condense the following curious statement:—

CASE.—At four o'clock a.m., May 22, 1835, Mrs. Aston, midwife, of Coventry, was requested to attend a woman in labour, who she found had already been in labour forty-eight hours, upon her knees, insisting upon being delivered in that position according to the custom of her country, Ireland. When induced to lie on the bed, an examination of the parts showed the os tincæ dilated to about the size of half-a-crown; the child's head presenting as usual. Every thing went on well, and the woman was delivered at 7 o'clock, the same evening, of a living child. The placenta followed whole in a quarter of an hour, being expelled by a pain. No hemorrhage ensued at the time, although a considerable quantity of blood was lost during the night. The after pains were trifling, and she felt so well, that she partook plentifully of animal food immediately after the midwife left.

At about four o'clock on Sunday morning, May 24th, Mrs. A. was hastily summoned in consequence, as the messenger stated, of the appearance of another child. The woman had risen during the night, and had gone into an adjoining room to make water; when her screams alarmed her husband, who called in some of the neighbours, and found the woman seated on a stool before the fire, with a vessel of warm water in front of her, and a large substance, which they compared to a child's head and neck, lying between her thighs, supported by her hands. The hemorrhage had been profuse. The midwife found the woman on the bed, pale from loss of blood, and in considerable pain. The blood had even run on to the floor. The uterus was lying on the bed, loosely connected to the vagina by a shred of membrane only. It was removed without effort, and placed in a bowl. The hemorrhage then ceased, and next morning the midwife brought the substance to my father, who discovered, to his astonishment, that it was an uterus inverted. At 11 o'clock he visited the woman. She was completely exhausted, extremely restless, throwing her arms about: pulse scarcely perceptible. She had passed some urine shortly after loss of the uterus, as also on the following morning. Her bowels had not been relieved for nine days before delivery, except a mass of hardened fecal matter which was discharged with the last pain in the labour.

The woman did not much complain of any sensation like bearing down, nor of any substance lying in the vagina, nor of suffering much pain: neither was there much distention of the abdomen, nor was there then or at any time during the progress of the case, any thing more than a slight degree of tenderness, which, however, was hardly noticed, except upon pressure. It was apparent in the left lumbar region only. The only part of the uterus and its appendages not found in the bowl, was the left ovary. The uterus, on inspection, was a heavy, hollow, but firm pyriform body, very nearly as large as an ordinary child's head, at term. No laceration was visible, except a slight rent in the posterior lip of the os uteri. The attachment of the placenta was distinctly marked, being of a deeper brown red than the remainder of the mass; a quantity of flocculent matter adhered at its site to the walls of the uterine cavity. It was inserted over, and concealed the opening of, the left fallopian tube. This orifice was easily discovered by detaching a small portion of the loose flocculent substance. The vessels were large and tortuous, and fully accounted for the great hemorrhage. Upon making a section along its anterior aspect, the broad ligaments, with both fallopian tubes, and the right ovary, were discovered. The fimbriated extremities of the tubes were particularly clear and distinct, the left ovary appeared to have been detached, and to have remained in situ.

My father judged it prudent not to institute any examination per vaginam, fearing, also, that any salutary union of the sides of the vagina might thus be retarded, and risk an ulterior prolapsus of the abdominal viscera. He enjoined perfect quietude and absolute restriction to the horizontal position, abstaining from active medicine, and ordering a light farinaceous diet.

May 25. Monday morning. The patient had risen during the night, and passed her urine freely. She had slept, and appeared as well as on the previous evening. Towards evening she passed several small scybalæ. She went on without accidents, except some increase of tenderness of the side, and some degree of fever, and diarrhœa on the 27th of May, which continued for three or four days, but which was then checked, and from that time she gradually regained her health and strength.

Previous to her confinement, milk was secreted in considerable quantity, but immediately after the loss of the uterus, this secretion, together with that of the lochia, was arrested, yet she persisted in applying the child to the breast, which induced considerable pain and hardness of the right mammæ, attended with much febrile excitement. These symptoms subsided upon the exciting cause being removed. When her health had been in some degree re-established, she again gave the child the breast, and persevered in doing so during several weeks, until, finding that she had no milk, she finally desisted. During the febrile attack, the tongue at no time exhibited any approach to a furred state. She is now in tolerable health; her complexion is pale and sallow as before, and she complains of a good deal of debility, but not such as to preclude her from following her usual occupation.

The child was for a long time in good health, but about a month since it was attacked by diarrhœa and died.

Principal Physiological Phenomena.—Those which present themselves in the history of this case are, the sudden and immediate suppression of the secretion of milk, and the absence of any flow of the lochia. So trifling indeed was the quantity of the latter, that the napkins were but slightly soiled; the hemorrhage too was completely arrested, as she did not lose a drop of blood after the morning of the 24th (Sunday). There is this additional peculiarity connected with the former fact—viz. that the milk had already appeared in considerable quantity before the loss of the uterus, but was entirely and permanently suppressed within two days after the separation of that organ. It was with a view of restoring the supply of this fluid that the woman persisted in applying the child to the breast, and, impressed with the same idea, she continued to do so until within a short period of the child's death, when finding her efforts vain, and that not a drop ever exuded, she finally desisted. She was repeatedly remonstrated with upon the subject.

The absence of all peritoneal inflammation, also, is a circumstance particularly worthy of remark, no means being taken to prevent it. The only symptom which ever caused any anxiety as to peritonitis was a slight degree of pain in the left lumbar region. The great quantity of blood lost when the uterus was separated, might in some measure serve to explain this singular fact? With regard to the violence which effected so complete a removal of the uterus, thirty-six hours after delivery, it is almost impossible to conceive it to have been offered by the woman herself, and yet such, there is every reason to believe, was the fact, if violence alone can suffice to account for such an event. The midwife most positively asserts, and her statement is strongly corroborated by the neighbour who first saw the woman on the morning of Sunday, that no effort was required to remove it from its loose connection with the vagina.

It is equally difficult to account for the inversion of the uterus, or to state when it occurred, as, from the appearance presented on examination, it must have hap-

pened spontaneously, no traces of any violence existing, and no portion of the placenta or other body remaining, by which sufficient traction could have been made. Previous to its descent on Sunday, nothing, which could have led to any suspicion of such an event, had happened.

The fact of none of the viscera following the uterus, and the total absence of bearing down, are equally inexplicable, unless we adopt the idea that the rectum, distended with fecal matter, had fallen forward towards the pubes, and closed the sides of the vagina. Yet the woman had not the slightest difficulty in micturition. I have not been able to ascertain whether she passed urine on the night of Friday. This circumstance will, perhaps, bring us nearer the epoch of the inversion of the uterus, as it is difficult to suppose a body of such magnitude to have been in the vagina without obstructing the flow of urine. Owing to her constant refusal to permit any examination per vaginam after recovery, I am not able to describe the parts at the present moment. Probably the vagina forms a cul-de-sac, in consequence of the adhesion of its opposing surfaces. Sexual intercourse has repeatedly been had with her husband, no mechanical obstruction existing.

In connection with the loss of one ovary, it is interesting to be able to state, that, although no impediment to coitus exists, yet the usual feelings and desires are entirely wanting. This might have been anticipated had both ovaria been removed, but one still remains *in situ*. Of course the menstrual discharge has never reappeared; even the small quantity occasionally furnished by the vagina has not been observed.

The history of this case demonstrates the possibility of removing an organ so voluminous and essential as the uterus, together with the ovaries, fallopian tubes, and ligaments, with only a slight impairment of the general health.

A question has been raised—Can a woman, after extirpation of the uterus, ever become the subject of an extra-uterine conception, should the vagina not close and form a cul-de-sac? It is obvious that nothing of the kind can ever happen to the woman whose case forms the subject of these pages, as the left ovary was the only portion of the uterine appendages not found in the bowl, and all sexual feeling is extinct.

I have not met with any case which may fairly be considered as parallel to the present. In all the other cases the mammæ became wasted and absorbed: in the present instance they are still prominent, but this, I think, may be attributed to her perseverance in permitting the child to suck.

MODE OF

REPRODUCTION OF BONE AFTER EXFOLIATION.

In the *Edinburgh Medical and Surgical Journal* for January 1836, we find an article of which the following is a condensation. It occurs under the head of "*Clinical Report for the Summer Session*, 1835. By Mr. James Syme, Surgeon to the Royal Infirmary:"—

There are still several circumstances in the history of necrosis which remain very mysterious. One of the most interesting of these, is the process by which exfoliations comprehending the whole thickness of a bone are reproduced. Sometimes nearly the entire shafts of the tibia and humerus come away. But we have seldom an opportunity of investigating by dissection the reproductive process at a stage sufficiently early for discovering the nature of the steps by which it accomplishes ossification. In the case which is now to be detailed, the process of reproduction had advanced just to the extent desirable for pathological inquiry, and I think it will go far to put at rest the long agitated questions on this subject:—

Case.—Beatrice Stokes, aged 13, strained her ankle by a false step on the 24th of March. Rigors, vomiting, and headache, attended with intense pain in the leg, and the usual symptoms of inflammatory fever, soon followed. She was sent to the *Royal Infirmary* on the 21st of April. From the middle of the thigh down to the toes, the limb was red, swelled, and tense, except at the fore part of the leg, a little above the ankle, where fluctuation could be felt. Incisions were made, a large quantity of thick dark-coloured matter was evacuated, and the patient greatly relieved. Through the openings the bone was found extensively denuded, and it became necessary to amputate the limb. The recovery was tedious, but perfect.

Examination.—When the limb was examined, it appeared that nearly the whole articulating cartilage of the ankle-joint had been removed by ulceration, leaving the bone bare and rough. The shaft of the tibia seemed to be dead throughout almost its whole extent, and had already undergone considerable erosion by the absorbents at its junction with the cancellated texture adjoining the epiphyses. When the finger was carried along the surface of the dead bone through an incision that had been made to expose it, a dense case or shell was felt, which, when displayad by dissection, proved to be the periosteum greatly thick-

ened, with osseous matter deposited in its substance. The membrane was traced distinctly from its sound part, where covering the epiphyses, over the dead shaft, and no one who saw it could doubt that it afforded the bed or matrix in which the new bone was deposited. Where covering the posterior surface of the tibia, though detached from the bone, it had suffered comparatively little change, which rendered its recognition at other parts more certain. The new bone did not constitute a continuous shell, but was deposited in flat masses, or scales, of various extent, between which the periosteum intervened so as to insulate them completely from each other, or any portion of the old bone retaining its vitality. The osseous substance lay on the inner surface of the periosteum, with merely a fine film of the membrane covering it, but with a considerable quantity of soft getatinous, substance like coagulable lymph effused over this, so as to line the interior of the case. At several parts of irregular size and figure, the periosteum did not exist, and at these parts there was a corresponding deficiency in the new bone. These apertures resembled the *cloacæ*, as they are named, which exist in the investing shells that are formed in cases of necrosis, and are usually ascribed to absorption induced by the pressure of matter confined within the bone. But it seems more probable, from this case, that the deficiencies in question depend upon the periosteum being destroyed at particular points in the commencement of the disease.

Remarks.—In explaining the history of this case, I think it may be reasonably supposed that the strain of the ankle occasioned inflammation of the joint, which extended to the tibia, and led to ulceration of the articular cartilages, and death of the shaft of the bone; that then suppuration took place under the periosteum, which having become at some parts disorganized, allowed the matter to pass outwards and distend the skin; that lymph was effused from the inner surface of the remaining periosteum, and also in its substance, so as to render it much thicker and softer than usual; and that then bone was deposited towards the inner surface of the membrane in numerous detached points, from which it was proceeding so as to make them coalesce, and constitute a cylindrical case to the shaft.

KING'S COLLEGE, STRAND.

To the Editor.—Sir, Devoted as you have ever been to the interests of the medical student, I presume now to address you in hopes that you may be able to suggest some remedy by which I can be compensated for the loss of time and money which I have sustained from having entered as a pupil this session at *King's College*.

It appears to me, as the professors have not fulfilled their agreement, that a part, if not the whole, of the money I was obliged to disburse, on entering, should be returned to me. Dr. Bisset Hawkins, as you well know, has not given a single lecture this session, and in his stead we had nothing but a hum-drum Scotch parson, who preached most soporific twaddle to us. Professors Hawkins and Mayo are in constant strife, and as their resignation is considered certain, their lectures are proportionably slovenly and incomplete. Your candid opinion and sincere advice will oblige your sincere admirer,

A KING'S COLLEGE STUDENT.

Strand, Jan. 6th, 1836.

*** If the writer thinks he could establish a charge of obtaining money under false pretences, he might succeed at one of the police offices. It is in the Bow-Street district.

Mr. DON has been elected to fill the vacant chair of botany at the *King's College*, Strand. Between that school and the *Charing-Cross Hospital*, nothing decisive has as yet been arranged. The medical men of the Hospital who are likely to lose their appointments as lecturers in the Charing-Cross School, are opposed to the union. Into this Hospital several Poles in the most destitute state have been received, but when fit for discharge, starvation stares them in the face. They have no homes to go to. The officers of the establishment ask what is to be done with them, or what can be done for them?

A Practical Treatise on Urethritis and Syphilis, including Observations on the power of the Menstruous Fluid, and of the discharge from Leucorrhœa and Sores, to produce Urethritis. With a new Classification of Venereal Eruptions, and a proposal of a substitute for Mercury. By Wm. Henry Judd, M.R.C.S. &c., London. Highley. 8vo. pp. 568. With coloured plates.

CORRESPONDENTS.

Civis has not framed his questions very physiologically. They cannot, therefore, be answered in direct terms. The quantity of air inhaled continually varies without voluntary exertion. It may also be increased at pleasure; but not necessarily with good effect on the health. Changes of air continually work improvement in the whole system. The lungs are peculiarly adapted to suffer

the process of imbibition, and resort has frequently been had to them as media for administering remedial agents, but as yet, without marked and extensive advantage. It is not worth while to agitate the question (except in one or two diseases) while more obvious and less delicate channels of communication are readily approachable.

Mr. Sopwith will perceive, by the contents of the last week's LANCET, that his first was in print before his present letter was indited. The publication was unavoidably delayed from want of space.

A correspondent complains of "a custom," adopted by a lecturer at the West End, "during this course of lectures, of occupying a large portion of the time of his audience, by calling over the names of about a hundred students two or three times a week." He states that the practice is a "source of great annoyance to the majority of the class, whose attention is thus taken up instead of having it devoted to instruction." Another correspondent regards the "custom" as one adopted "with a view to displaying an array of names, of which the majority are not likely, for very good reasons, to find owners in the room. The class," he adds, "would be obliged by the abandonment of the practice."

Gamma may be assured that his friend labours under an egregious deception. The results described are impossible. We should advise the party to state his case, orally, to some respectable medical gentleman residing in the neighbourhood, when, if the aberration from a state of health be not of the intellect, conviction of the absurdity of his impressions must follow.

N. If the practitioner who made the charges, be qualified, legally, to practise as an apothecary, he would be enabled to sustain his charges in a Court of Law. At any rate, the lady would be placed in a worse position than the one she now occupies by resisting the payment of the demand. On the "hardship" of the case we cannot express an opinion.

To the Correspondent who dates his letter "Tuesday morning."—As the matter has been brought so directly under our notice, we will examine the production, and next week state the result. It certainly, however, was the business of our Correspondent to prevent, in so brief a compass, the chief sources of complaint.

ERRATUM.—Page 608, of this Number, col 2, line 17, for *compressed*, read *comprised*. Page 611, line 27, for *a ligament*, read *ligaments*.

METEOROLOGICAL REPORT.

(Extract from a Meteorological Journal kept at High Wycombe.)

Days.	Thermometer.		Barometer.		Rain.		Wind.	Weather.
	Highest.	Lowest.	Highest.	Lowest.	Ins.	Dcls.		
Jan. 4	45.25	43.50	29.98	29.96	—		S.W.	The whole week dull and heavy, with rain on the 5th and 6th, and sleet and snow on the 9th and 10th.
5	48.50	42.	30.01	29.98	0.0125		S.W.	
6	45.	38.25	29.98	29.86	0.0375		E.	
7	39.50	33.75	29.68	29.65	—		E.	
8	39.	28.50	29.75	29.70	—		E.	
9	39.50	28.75	29.72	29.57	—		E.	
10	28.75	27.75	29.97	29.13	—		N.E.	

Observations for December,

Thermometer. Highest, 40.50, on the 1st; Lowest, 1.2, on the 25th; Mean, 31,00130.—Barometer. Highest, 30,28, on the 23rd; Lowest, 29,68, on the 1st; Mean, 29,80834.—Number of days of rain, 9; Quantity in inches and decimals, 0,2625.—Winds. 5 East; 2 West; 2 North; 1 South; 5 North east; 6 South-east; 7 South west; 3 North-west.

In relation to the prevalence of certain diseases, as connected with atmospherical influence, it may be observed, that fever of an adynamic type, not strictly amounting to what is usually denominated typhus, with the exception of a few cases, has for some months prevailed in this neighbourhood. The inflammatory affections of children have also formed a large portion of the existing maladies, during the same space of time.

High Wycombe, Jan. 12th, 1836. W. JACKSON.